about 300 coloured drawings
over 400 Sowerby plates
hundreds of sketches

Text and plates are
the work of James Sowerby

[this is the Coverdown
Observer / W. S. Savage
Secretary-Librarian / the
Linnean Society]

James Sowerby d. 1822.

480

Myosotis Scorpioides

Mouse Ear Scorpion Grass

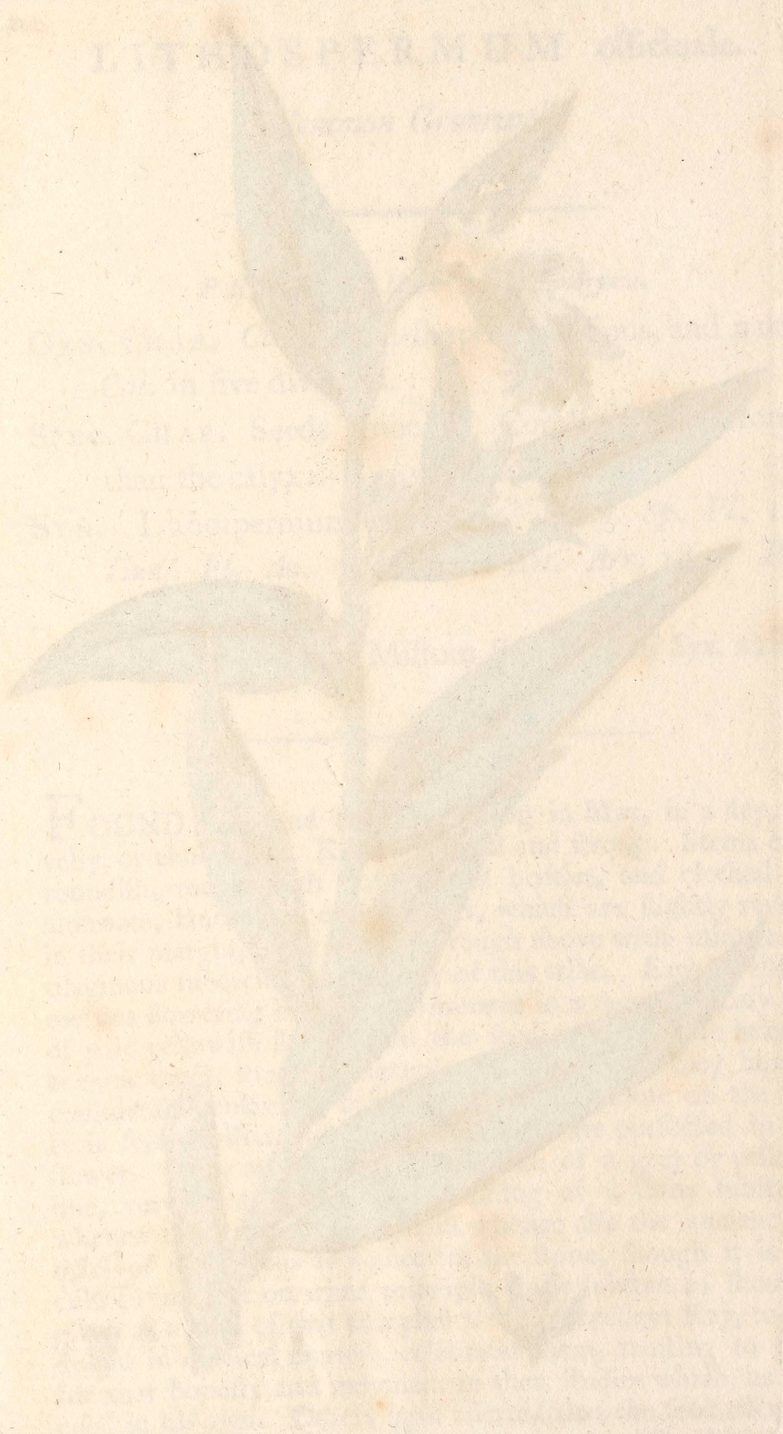
Pentandria Monogynia

Gen. Ch. Cor. 5 Cleft. Salver shaped slightly notched its orifice closed with concave Valves

Spec. Ch. Seeds Smooth. Leaves elliptic lanceolate. Clusters of many flowers without Bractea

The Smaller Variety of this plant represented entire in our figure is common on dry sandy or gravelly hillocks generally near Water upon heaths it is also frequent in fallow fields & a still smaller Variety with flowers entirely yellow grows on Walls. The large Variety is said to be perennial. it grows in ditches & clear Springs to which its enamelled blue flowers generally pink in the bud are a distinguished ornament

Myosotis 1



Published by J.ᵗ Sowerby Sept.ʳ 1.ˢᵗ 1793.

LITHOSPERMUM officinale.

Common Gromwell.

PENTANDRIA Monogynia.

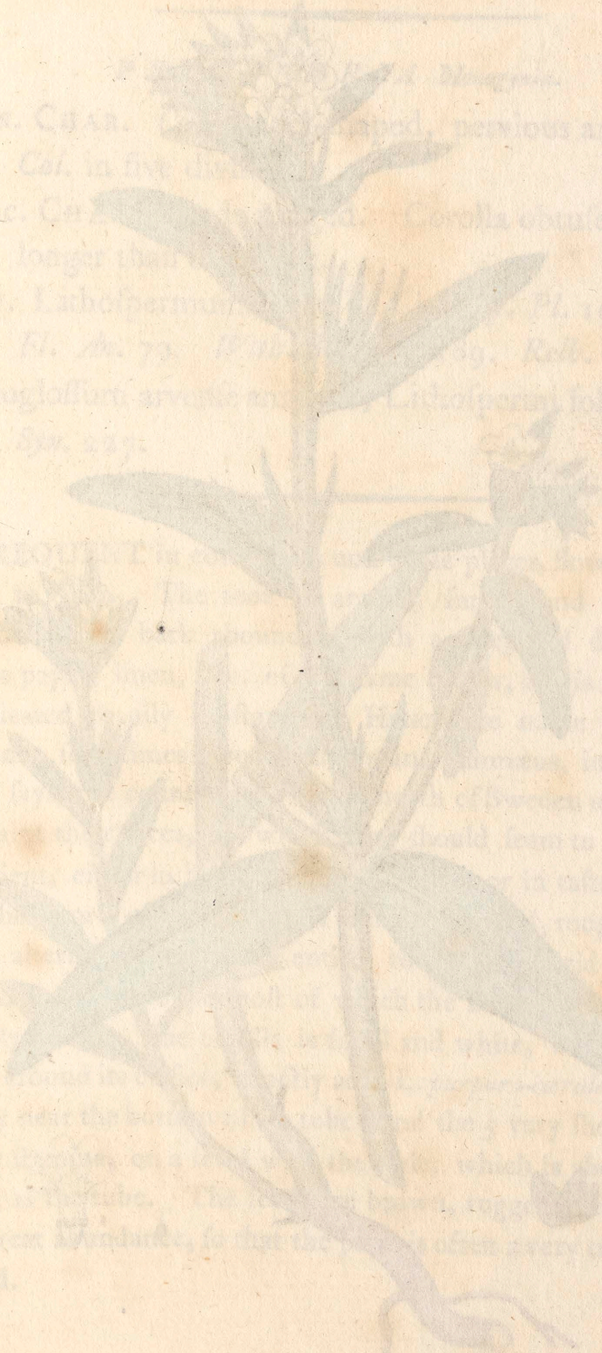
GEN. CHAR. *Cor.* funnel-ſhaped, pervious, and naked. *Cal.* in five diviſions.

SPEC. CHAR. Seeds ſmooth. Corolla ſcarcely longer than the calyx. Leaves lanceolate.

SYN. Lithoſpermum officinale. *Linn. Sp. Pl.* 189. *Hudſ. Fl. An.* 79. *With. Bot. Arr.* 189. *Relh. Cant.* 76.

Lithoſpermum, ſeu Milium Solis. *Raii Syn.* 228.

FOUND here and there flowering in May, in a dry, gravelly, or chalky ſoil. Root perennial and ſtrong. Stems erect, roundiſh, rough with cloſe-preſſed briſtles, and clothed with alternate, lanceolate, entire leaves, which are ſlightly revolute in their margin, hairy beneath, rough above with minute cartilaginous tubercles, as in many of this tribe. Each of the numerous flowering branches terminates in a recurved leafy ſpike of pale yellowiſh flowers; in the ſeeding ſtate theſe branches become erect, much elongated, and the leaves they bear are conſiderably enlarged, being broader than thoſe on the ſtem. It is ſeldom that more than two ſeeds are perfected in each flower. They are exquiſitely poliſhed, of a grey or yellowiſh hue, very hard, but brittle, ſeeming of a ſtony ſubſtance; whence the generic name, and whence alſo the ancient celebrity of theſe ſeeds as a cure for the ſtone, though it is difficult to imagine on what principle ſtony ſubſtances ſhould be given as a cure of that complaint. The excellent Ray, too credulous in medical matters, celebrates them, truſting to others for that honeſty and judgment in their ſtudies which he exerciſed in his own. Others have aſſerted that the ſeed effervesces with acids; but Linnæus (*Flo. Suec.*) contradicts this, and we have carefully made the experiment without ſucceſs.



123

J. Sowerby del. Aug 1 1793.

LITHOSPERMUM arvenſe.

Corn Gromwell.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* funnel-ſhaped, pervious and naked. *Cal.* in five diviſions.

SPEC. CHAR. Seeds rugged. Corolla obtuſe, ſcarcely longer than the calyx.

SYN. Lithoſpermum arvenſe. *Linn. Sp. Pl.* 190. *Hudſ. Fl. An.* 79. *With. Bot. Arr.* 189. *Relh. Cant.* 76. Bugloſſum arvenſe annuum, Lithoſpermi folio. *Raii Syn.* 227.

FREQUENT in corn-fields and waſte places, flowering from May to July. The root is annual, ſmall, and not much branched; its bark abounding with a deep red dye, which ſtains paper, linen, &c. of the ſame colour, and is eaſily communicated to oily ſubſtances. Hence the name of Baſtard Alkanet, ſometimes given to this plant. Linnæus, in Flo. Suecica, ſays, the country girls in the north of Sweden uſe the root to paint their faces, by which they ſhould ſeem to be terribly deficient, either in healthy natural bloom, or in taſte.

The ſtem is often very much branched, round, rough, clothed with alternate, lanceolate, entire, rough and rigid leaves, in the axillæ of the uppermoſt of which the flowers ſtand ſolitary, nearly ſeſſile. The corolla is ſmall and white, with five ſwellings around its orifice, exactly as in L. *purpuro-cæruleum*, t. 117. Very near the bottom of its tube ſtand the 5 very ſhort and minute ſtamina, on a level with the ſtyle, which is about half as long as the tube. The ſeeds are brown, rugged, and produced in great abundance, ſo that the plant is often a very troubleſome weed.

Lithospermum 2

[123]

LITHOSPERMUM arvense.

Corn Gromwell.

PENTANDRIA Monogynia.

Gen. Char. Cor. funnel-shaped, pervious and naked.

Cal. in five divisions.

Spec. Char. Seeds rugged. Corolla obtuse, scarcely longer than the calyx.

Syn. Lithospermum arvense. Linn. Sp. Pl. 190. Fluff. Pl. Am. 79. Fl. Brit. 287. Relh. Cant. 76. Bugloßum arvense minus, Lithospermi folio. Raii Syn. 227.

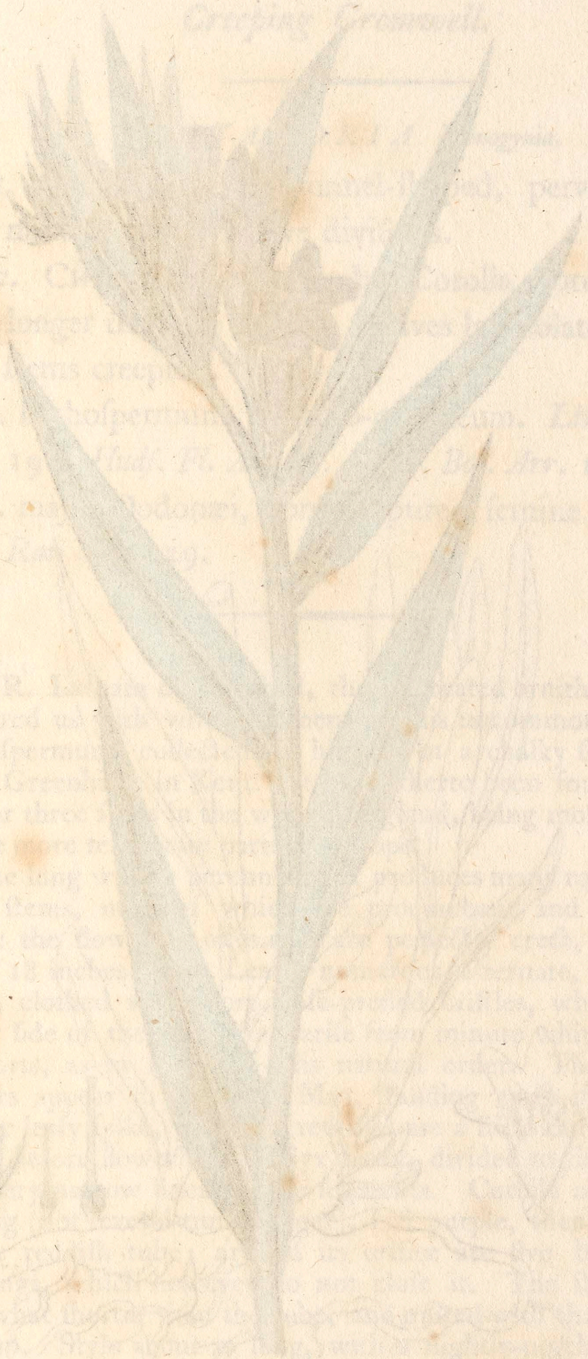
FREQUENT in corn-fields and waſte places, flowering from May to July. The root is annual, ſmall, and not much branched. The bark abounding with a deep red dye, which ſtains paper, linen, &c. of the ſame colour, and is eaſily communicated to oily ſubſtances. Hence the name of Baſtard Alkanet, ſometimes given to this plant. Linnæus, in Fln. Suecica, ſays the country girls in the north of Sweden uſe the root to paint their faces, by which they ſhould ſeem to be terribly deficient, either in beauty, modeſty, or in taſte.

The ſtem is often very much branched, round, rough, clothed with alternate, lanceolate, entire, rough and ſtiff leaves, in the axille of the uppermoſt of which the flowers ſtand ſolitary, nearly ſeſſile. The corolla is ſmall and white, with five ſwelling round its orifice, cloſely ſet. Very near the bottom of its tube ſtand the 5 very ſhort and minute ſtamina, on a level with the ſtyle, which is about half as long as the tube. The ſeeds are four, rugged, and produced in great abundance, ſo that the plant is often a very troubleſome weed.

[14]

LITHOSPERMUM purpureo-cæruleum.

Corolla funnelsh.



J.s Sowerby del.t July 1793.

LITHOSPERMUM purpuro-cœruleum.

Creeping Gromwell.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* funnel-ſhaped, pervious, and naked. *Calyx* in five diviſions.

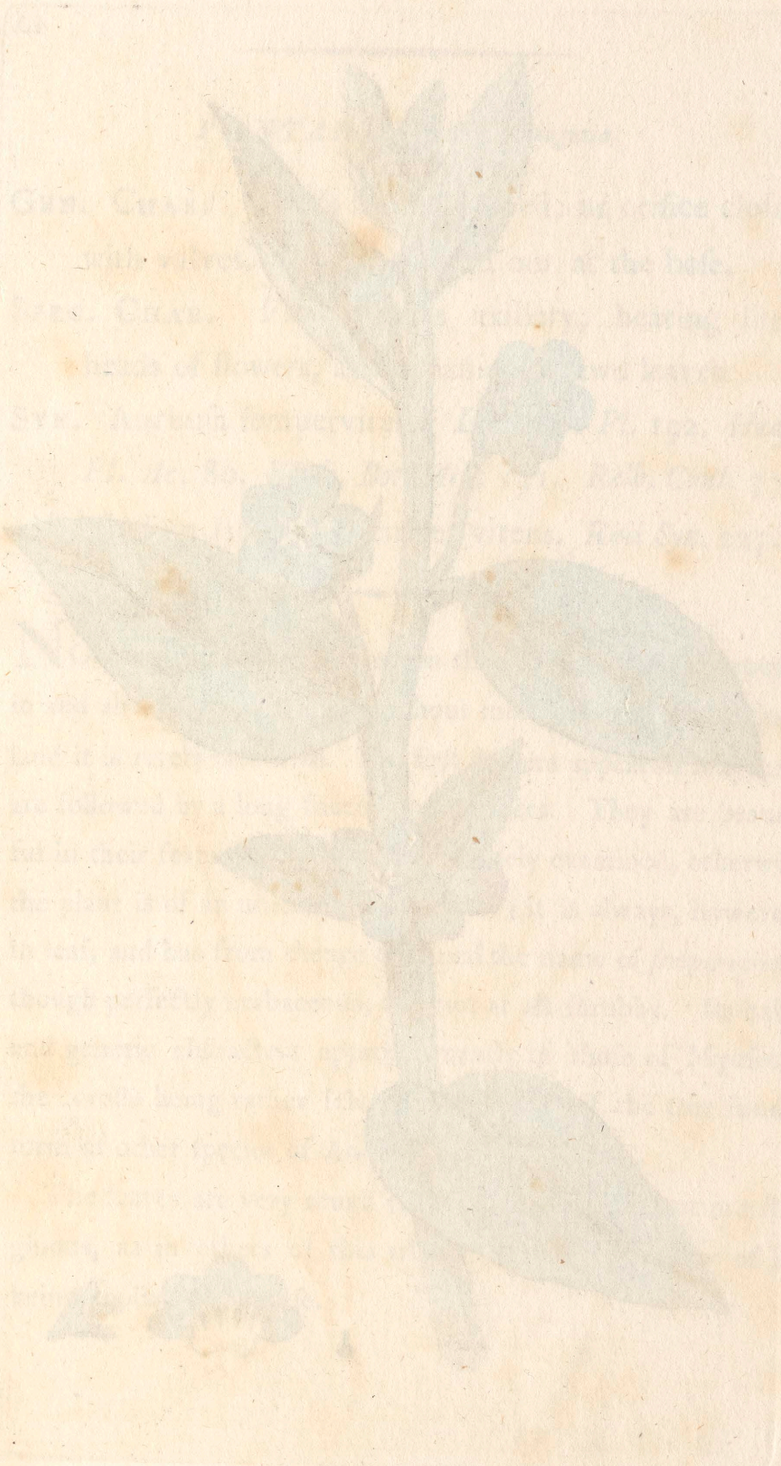
SPEC. CHAR. Seeds ſmooth. Corolla obtuſe, much longer than the calyx. Leaves lanceolate. Barren ſtems creeping.

SYN. Lithoſpermum purpuro-cœruleum. *Linn. Sp. Pl.* 190. *Hudſ. Fl. An.* 79. *With. Bot. Arr.* 190.

L. majus Dodonæi, flore purpureo, ſemine Anchuſæ. *Raii Syn.* 229.

MR. Latham of Dartford, the celebrated ornithologiſt, has favoured us with wild ſpecimens of this uncommon ſpecies of Lithoſpermum, collected by himſelf in a chalky ſoil not far from Greenhithe in Kent. It has hitherto been found only in two or three ſpots in the weſt of England, being moſt abundant in the more temperate parts of Europe.

The long woody perennial root produces many round, hairy, leafy ſtems, moſt of which are procumbent, and throw out roots: the flowering ones only are perfectly erect, and about 12 or 18 inches high. Leaves numerous, alternate, lanceolate, acute, clothed with ſhort cloſe-preſſed briſtles, which on the upper ſide of the leaf often ariſe from minute white tubercles or warts, as in many of this natural order. The beautiful flowers appear in April or May, ſtanding erect in a ſort of double leafy ſpike, whoſe extremities are a little curved downwards before flowering. Calyx hairy, divided to the baſe into five very narrow linear obtuſe ſegments. Corolla about twice as long (not ſeveral times longer), firſt purple, then blue, with a pale reddiſh tube; around its orifice are five blunt hairy ſwellings, which however do not cloſe it. The ſtamina are ſomewhat ſhorter than the tube, and united with that part half way up. Style about as long, with a ſlightly-notched ſtigma. Germen and ſeeds very ſmooth; the latter are frequently abortive, as in moſt plants that increaſe much by their roots.



J. Sowerby del.t Publ.d 1.1792

ANCHUSA ſempervirens.

Evergreen Alkanet.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* funnel-ſhaped: its orifice cloſed with valves. *Seeds* hollowed out at the baſe.

SPEC. CHAR. Flower-ſtalks axillary, bearing little heads of flowers, accompanied by two leaves.

SYN. Anchuſa ſempervirens. *Linn. Sp. Pl.* 192. *Hudſ. Fl. An.* 80. *With. Bot. Arr.* 191. *Relh. Cant.* 77. Bugloſſum latifolium ſemper virens. *Raii Syn.* 227.

NO plant can be more common than this is in waſte ground in and about Norwich; throughout moſt other parts of England it is rarely met with. The firſt flowers appear in May, and are followed by a long ſucceſſion of others. They are beautiful in their form and colour when cloſely examined, otherwiſe the plant is of an unſeemly appearance; it is always, however, in leaf, and has from thence obtained the name of *ſempervirens*, though perfectly herbaceous, and not at all ſhrubby. Its habit and generic characters approach nearly to thoſe of Myoſotis, the corolla being rather ſalver-ſhaped, than of the true funnel form of other ſpecies of Anchuſa.

The leaves are very rough; the juices of the plant mucilaginous, as in others of this tribe. We do not know of its being applied to any uſe.

Anchusa 1

Archives 3

Anchusa officinalis – Common Alkanet

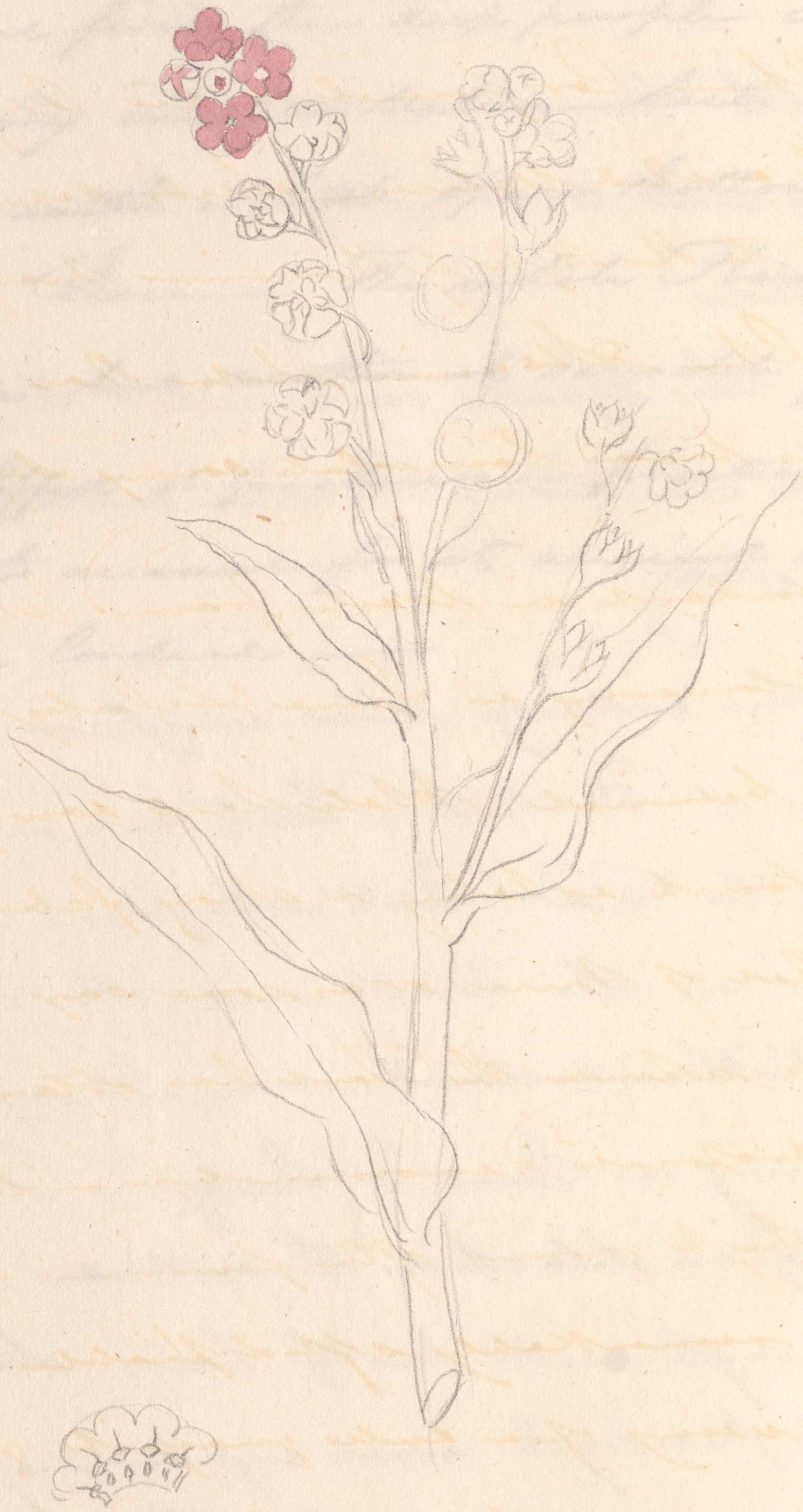
Pentandria Monogynia

Gen. Ch. Cor. funnel shaped – its orifice closed with Valves – Seeds hollowed out at the base

Spec. Ch. Spike imbricated the flowers all on one side – Bractea ovate leaves lanceolate

For this entirely new accession to the Catalogue of British Plants we are indebted to the Revd Thos Batt who found it plentifully on the Links near Hartley Pans in Northumberland – It is perennial flowering in June & July – Root Spindle shaped black on the outside white Herb rough with bristly hairs. Stem about 1½ or 2 feet high erect angular hoary a little branched panicled at the Top – leaves alternate lanceolate acute entire scarcely at all waved or crisped in the margin the upper ones ovate at the base – Spikes generally in Pairs revolute – all the flow-

ers thickly set on one side & pointing upwards
As the stalk lengthens they become more
remote Bracteæ ovate. Cal. deeply 5 clefft
Cor. red at first then deep purple closed
with laing concave Valves — Seeds brown
pointed with a little Space hollowed out
at their Base — The whole Plant is mu
cilaginous but neither its sensible Qualities
nor any Effect it produces in practice are suf
ficient to account for its ancient reputa
tion as a Cordial —



Cynoglossum officinale - Com. Hounds tongue

Pentandria Monogynia

Gen. Ch. Cor. funnel shaped Angles close with arched Valves. Seeds depressed fixed to the Style by their inner Margin only

Spec. Ch. Stamina shorter than the Cor. Leaves broad lanceolate. downy Supine

Abundant in waste ground & by Road sides flowering in June & July

Root biennial. Whole Plant downy & soft to the touch exhaling a strong fetid smell like that of Mice. or as some say the Urine of Dogs when the Plant has obtained a coarse & unpleasant denomination — Stem about 2 feet high round often forked hairy Leaves remarkably soft & pliable entire waved veiny of a dull grayish green — The lowermost larger & stalked lanceolate upper ones embracing the Stem & almost heart shaped Flowers in terminal nearly Clusters growing one into Spikes forming a Panicle — Cal downy. Cor. dull purplish red its lobes rounded as are also the little

hollow tubes that clasp the mouth & conceal the stamina. Stigma acute. Seeds 4 ho-
rizontal obovate attached by their points
each cloaked in a flat thick coat rough
with numerous hooked prickles by which
the seeds stick to the coats of animals &
are widely dispersed.

The Cynoglossum is narcotic astringent
& mucilaginous but dangerous to be taken
internally as lately in quantity

T. Sowerby del.t July 1st 1793.

PULMONARIA officinalis.

Common Lungwort.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* funnel-ſhaped, pervious. *Calyx* priſmatic, five-ſided.

SPEC. CHAR. Calyx nearly as long as the tube. Upper leaves ovate, acute, rough.

SYN. Pulmonaria officinalis. *Linn. Sp. Pl.* 194. *Hudſ. Fl. An.* 81. *With. Bot. Arr.* 193.

P. foliis Echii. *Raii Syn.* 226. *Ger. em.* 808.

HOWEVER common in every garden, the Pulmonaria is of very unfrequent occurrence with us in a wild ſtate, inſomuch that authors are not agreed about the identity of our Britiſh ſpecies (ſee Withering). We have fortunately obtained, by the favour of Mr. E. Robſon, a wild ſpecimen from near Darlington, which being compared with the Linnean herbarium, decides the P. officinalis, at leaſt, to be a Britiſh plant. Mr. Goodyer's plant from the New Foreſt is moſt probably the ſame. How far the real P. anguſtifolia *(Herb. Linn.)* may be ſpecifically diſtinct, we dare not determine. The P. maculoſa, *Ger. em.* 808. *f.* 1. ſhould ſeem to be a broad-leaved variety of ours, from whence the ſpecific character of Linnæus was taken, which we have ventured to alter that it may better accord with our ſpecimens, and indeed with his own, which exhibit the uſual appearance of the wild plant throughout Europe. In Italy nothing is more common in groves and thickets.

The root is perennial; ſtems ſimple, erect, near a foot high, angular, and rough. Lower leaves much lengthened out at the baſe, of a light green; the upper ones only, which are ovate, and rather broad, being ſpeckled with white on the upper ſide. This however is a variable circumſtance. The flowers appear in April or May. The plant loves ſhade. Every part is muicilaginous; but its reputation as a cure for coughs, aroſe not from that circumſtance, but from its ſpeckled appearance, reſembling the lungs!

Much conformity is obſervable between the ſtructure of this flower and that of Lithoſpermum purpuro-cœruleum, *t.* 117. Indeed the genera of many of the *Aſperifoliæ* are ſomewhat too nearly allied.

Pulmonaria 5

June 1. 1797 Published by J.t Sowerby London

PULMONARIA maritima.

Sea Lungwort.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* funnel-ſhaped, pervious. *Calyx* priſmatic, five-ſided.

SPEC. CHAR. Calyx ſhort. Leaves ovate. Stem much branched, procumbent.

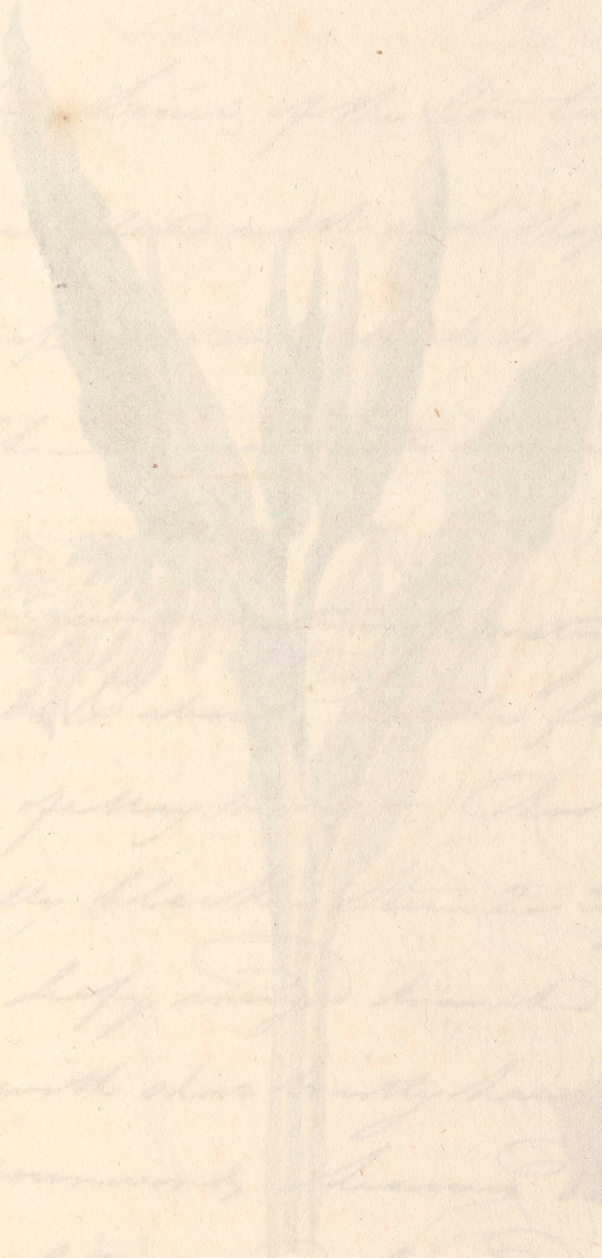
SYN. Pulmonaria maritima. *Linn. Sp. Pl.* 195. *Hudſ. Fl. An.* 81. *With. Bot. Arr.* 194. *Dickſ. H. Sicc. faſc.* 1. 3. *Lightf. Scot.* 134. *t.* 7.

Echium marinum. *Raii Syn.* 228.

A BEAUTIFUL ornament of the ſandy ſea-coaſts of Scotland and the north of England, for ſpecimens of which we are obliged to Mr. Robſon. It flowers in July, and is perennial according to the opinion of moſt authors, though the obſervations of Dillenius in the *Hortus Elthamenſis* ſeem to prove it biennial. There is no leſs uncertainty about the genus of this plant. It is certainly a very bad *Pulmonaria*, the calyx being too deeply divided to be deemed priſmatic, which is alſo the caſe in P. *virginica* & *ſibirica*. Dillenius (as well as Linnæus formerly) made it a *Cerinthe*, with which it moſt agrees in habit, but the eſſential character of *Cerinthe* is not to be found in the fruit. In fact the genera of this order (*Aſperifoliæ*), though ſo multiplied, are many of them ill defined and unnatural, as we have before obſerved, *p.* 118.

The root is fleſhy. Stems procumbent, much branched. Leaves ovate, entire, undulated, covered with a beautiful glaucous effloreſcence, and ſprinkled with minute cartilagineous tubercles, characteriſtic of the order. Flowers on longiſh ſimple flower-ſtalks, one or two together, ſometimes axillary, and generally cluſtered about the extremities of the branches. Calyx glaucous, in 5 ovate acute ſegments, its baſe a little priſmatic. Corolla with a ſhort thick tube, and a ſmall border in 5 obtuſe ſegments, red at firſt, then blue; orifice a little toothed, but pervious. Stamina inſerted about the middle of the tube, and projecting beyond the orifice. Stigma capitate. The whole plant turns black in drying, unleſs it be firſt immerſed in freſh water for 24 hours to extract the ſea-ſalt, according to Dillenius.

Lycopodium 6



817

Symphytum officinale - Comm Comfrey

Pentandria Monogynia

Gen Ch - Limb of the Cor. tubular swelling
its orifice closed with awl shaped rays. Cal
in 5 deep segments. Seeds 4 naked

Spec Ch - Leaves ovate lanceolate decurr

A frequent native of watery Places banks
of Rivers & about Ditches flowering from
the End of May to Sept. Root perd. fleshy
externally black - Stem 2 - 3 feet high
upright hairy winged branched at the top
clothed with short bristly hairs that point
rather downwards Leaves decurrent ovate
to lanceolate waved pointed veiny rough
the radical ones on footstalks & broader
than the rest Clusters of flowers in pairs
on a common Stalk with an odd flower
between them recurved dense hairy Cor.
Yellowish white sometimes purple the rays

downy at each edge—

The compny root abounds in a pure ~~tasteless~~ Mucilage like that of the Marsh Mallow & being as Dr Woodville observes more easily obtained it ought not to be omitted in lists of Medicinal Plants— Such Medicines are useful in Irritations of the Mucous intestines & above all the bladder—

J. Sowerby del.t Octr. 1. 1791.

BORAGO officinalis.

Common Borage.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-ſhaped: the orifice cloſed with rays.

SPEC. CHAR. Leaves all alternate. Calyx ſpreading.

SYN. Borago officinalis. *Linn. Sp. Pl.* 197. *Hudſ. Fl. An.* 82. *With. Bot. Arr.* 197. *Relh. Cant.* 78.
Borrago hortenſis. *Raii Syn.* 228.

THE Borage, whoſe bright blue flowers decorate almoſt every dunghill and heap of rubbiſh, is one of thoſe vegetables which, although not originally of Britiſh growth, are now ſo perfectly naturalized as to find a place in every catalogue of our wild plants. It is ſaid to have been brought from the Levant; and was at firſt cultivated in gardens as a medicinal herb, being reckoned, apparently without reaſon, one of the four cordial flowers. Hence the old adage,

"Ego Borago gaudia ſemper ago"—

which Gerarde renders,

"I Borage bring always courage—"

a tranſlation worthy of the elegance of the original. The ſame author adds from Dodonæus—

"Thoſe of our time do uſe the floures in ſallads, to exhi-
"larate and make the minde glad. There be alſo many things
"made of them, uſed for the comfort of the heart, to drive
"away ſorrow, and increaſe the joy of the minde."

Very light ſurely were thoſe ſorrows that could be ſo driven away! Yet the Borage flowers were at leaſt innocent, which is more than can be ſaid of many more general remedies for care.

The whole herb is ſucculent and very mucilaginous, and has a peculiar faint ſmell when bruiſed. All the green parts are extremely hiſpid, with ſharp rigid white briſtles. The root is ſcarcely more than biennial with us. The flowers appear in great plenty in the ſummer months.

Borage 1

Asparagus 8

Asperugo procumbens - German Madwort

Pentandria Monogynia

Gen. Ch. Cal of the fruit compressed
it's 2 margins flat & parallel. unnulated

Spec. Ch. Cal of the fruit flattened throughout

A Plant of very rare occurrence this was
found at Wangford near Brandon - it is
an annual & flowers in July. Root
small & slender. Herb rough & sticking
to the hands or cloths by means of small
hooked spines like Galium Aparine - Hence
it has been called Aparine major & great
Goose Grass - Most of the hooks as stand up
on the stem point downwards those on the
leaves forward or towards the point of the
leaf. Stems prostrate & quadrangular - Leaves
2. 3. or 4 together not exactly opposite. spreading
when the plant is supported when it lies flat
they are directed upwards from the ground -
They are oblong lanceolate & entire - Flowers
small & pale blue solitary on short stalks

deep blue — Cor. in 5 rounded Segments
its orifice closed with a small purple con-
cave blunt Valves — Stamina in the tube
very short after flowering the flower stalks
are reflexed the Cal much enlarged com-
pressed unfolding 4 seeds which are smooth
in a young state rugged when ripe —

Lycopods 9

Lycopsis arvensis— Small Bugloss

Pentandria Monogynia

Gen. Ch— Cor with a curved tube the mouth closed with convex scales—

Spec. Ch— Leaves lanceolate hairy— Cal white in flower erect—

Common every where in fields & on dry hedge banks during the early part of Summer flowering chiefly in June after which the herb is dryed up scatters its seeds & the small annual Root withers away

It's juices are mucilagenous like those of Borage to which it is nearly akin however widely different in the Cor. & Stamina

181.

Jas Sowerby delt June 1 1794

ECHIUM vulgare.

Common Viper's Bugloſs.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* irregular, its orifice open and naked.

SPEC. CHAR. Stem briſtly and tuberculated. Stem leaves lanceolate, and rough with ſtiff hairs. Flowers in lateral ſpikes.

SYN. Echium vulgare. *Linn. Sp. Pl.* 200. *Hudſ. Fl. An.* 83. *With. Bot. Arr.* 200. *Relh. Cant.* 80. *Raii Syn.* 227.

A BEAUTIFUL and magnificent, though very vulgar weed, whoſe frequency in every high-way and field, eſpecially in a light ſoil, makes us deſpiſe it as an unprofitable intruder; yet we have ſeen inhabitants of tropical countries, on their arrival in Europe, ſo charmed with the viper's bugloſs, as to call it worthy to "decorate the gardens of the gods." The dry fields of Cambridgeſhire and Norfolk are perfectly blue with theſe flowers in June and July, nor is any part of England without more or leſs of them.

The root is biennial. Stem ſtrong, erect, round, moſtly ſprinkled with red tubercles bearing ſome of the very ſtiff briſtles which clothe every part of the herb, and which on the upper ſide of the leaves ariſe from white calloſities. The radical leaves are numerous, ſpreading in the form of a ſtar. Spikes ſolitary from each axilla of the ſtem-leaves, pendulous, but growing erect as the flowers open. Buds red. Corolla nearly regular, purple, then bright blue, downy on the outſide about the ribs. Stamina varying in length, but always ſomewhat longer than the corolla. The juices of the herb are very mucilaginous.

We can ſcarcely define the difference between this and E. italicum (for in this caſe the Linnæan characters unfortunately teach nothing), except that the ſtalk of the latter ſeems not to be tuberculated, and the flowers are not half ſo large as in E. vulgare.

5ª 1ª

Echium 10

J. Sowerby. del.t Jan.ry 1.1791.

PRIMULA vulgaris.

Common Primroſe.

PENTANDRIA Monogynia.

GEN. CHAR. *Capſule* 1-celled, ſuperior. *Tube* of the *corolla* cylindrical, mouth pervious. *Stigma* globoſe.

SPEC. CHAR. Leaves dentated, wrinkled. Border of the corolla flat.

SYN. Primula vulgaris. *Hudſ. Fl. An.* 83.
P. acaulis. *With. Bot. Arr.* 204.
P. veris var. γ. *Linn. Sp. Pl.* 205. *Fl. Dan. t.* 194.
P. veris vulgaris. *Raii Syn.* 284.

LINNÆUS, ever deſirous of avoiding too great a multiplication of ſpecies, conſidered the Primroſe, Oxlip and Cowſlip, as varieties only of each other; but moſt botaniſts have differed from him in this particular. Some have gone ſo far as to reckon them three diſtinct ſpecies. It ſeems however moſt agreeable to nature to conſider the firſt and laſt as diſtinct, though much more nearly akin than an inexperienced obſerver would ſuppoſe, and the rim of the corolla being concave in one and flat in the other, is a ſufficiently good ſpecific character.

The Oxlip (P. veris β of Linn. *Fl. Dan. t.* 434.), if not an hybrid production between the other two, may perhaps with the greateſt propriety be reckoned a variety of the Primroſe, from which it principally differs in having an elongated common foot-ſtalk, like the Cowſlip; whereas the common foot-ſtalk of the Primroſe is ſo ſhort as to be concealed among the leaves, as Linnæus and Dr. Stokes have obſerved. This plant is found every where in woods, thickets, and paſtures, flowering in April and May. Its bloſſoms have an agreeable fragrance.

"The Primroſe pale and Violet blue," being the chief ornaments of a ſeaſon which every paſtoral poet delights to celebrate, have been more frequently honoured in verſe than moſt other wild flowers.

J. Sowerby del.t Jan.y 1.1791.

PRIMULA veris.

Common Cowſlip.

PENTANDRIA Monogynia.

GEN. CHAR. *Capſule* one-celled, ſuperior. *Tube* of the *corolla* cylindrical, mouth pervious. *Stigma* globoſe.

SPEC. CHAR. Leaves dentated, wrinkled. Border of the corolla concave.

SYN. Primula veris. *Hudſ. Fl. An.* 84. *Linn. Sp. Pl.* 204. *Fl. Dan. t.* 433.
P. officinalis. *With. Bot. Arr.* 203.
P. veris major. *Raii Syn.* 284.

IN ſpeaking of the Primroſe we have already mentioned its affinity to this plant; one circumſtance is however remarkable in the Cowſlip, a contraction towards the middle of its leaves, which is not ſeen in the former. The Cowſlip is nearly as common, and flowers at the ſame time: it prefers a clay ſoil, and generally an open ſituation.

Cowſlip flowers are fragrant, and make a pleaſant wine, approaching in flavour to the Muſcadel wines of the South of France.

The leaves of this plant and the Primroſe are ſaid to afford nouriſhment to ſilk-worms: but thoſe animals are ſo very delicate, and the quality of their ſilk is ſo apt to be injured by the moſt trifling cauſes, that they are ſeldom found worth cultivating as an article of commerce, unleſs fed with the beſt and moſt healthy leaves of the White Mulberry (Morus alba). It is however an object worthy of the curioſity of thoſe who breed them for amuſement, to try what kinds of food may beſt be ſubſtituted in the place of their natural aliment, when a backward ſpring retards the growth of the Mulberry leaves.

J. Sowerby del.t Jan.y 1.1791.

PRIMULA farinoſa.

Bird's-Eye Primroſe.

PENTANDRIA Monogynia.

GEN. CHAR. *Capſule* one-celled, ſuperior. *Tube* of the *corolla* cylindrical, mouth pervious. *Stigma* globoſe.

SPEC. CHAR. Leaves crenated, ſmooth. Border of the corolla flat.

SYN. Primula farinoſa. *Linn. Sp. Pl.* 205. *Hudſ. Fl. An.* 84. *With. Bot. Arr.* 204. *Fl. Dan. t.* 125.
Verbaſculum umbellatum alpinum minus. *Raii Syn.* 285.

WET paſtures and little rills on the ſides of mountains in the north of England, eſpecially in Weſtmoreland, are the favourite ſituations of this elegant plant, nor can our Britiſh Flora boaſt many more beautiful productions. Of late years it has been frequently introduced into gardens. The powdery whiteneſs of its ſtalks and the backs of its leaves reſembles that of the Auricula. This circumſtance, from whence the trivial name *farinoſa* is taken, is not repreſented in the Flora Danica.

The habit of this Primula moſt nearly approaches that of the genera Androſace and Aretia, two very elegant tribes of plants found in alpine ſituations on the continent, and much ſought after by botaniſts. In thoſe genera however the tube of the corolla is oval, not cylindrical, and its orifice more or leſs cloſed with glands; whereas in all the Primulas that part is open, and only ſlightly crenated. Nevertheleſs theſe three genera, and even Cortuſa, might perhaps be united without any great violence to nature.

Primula elatior. Ox lip

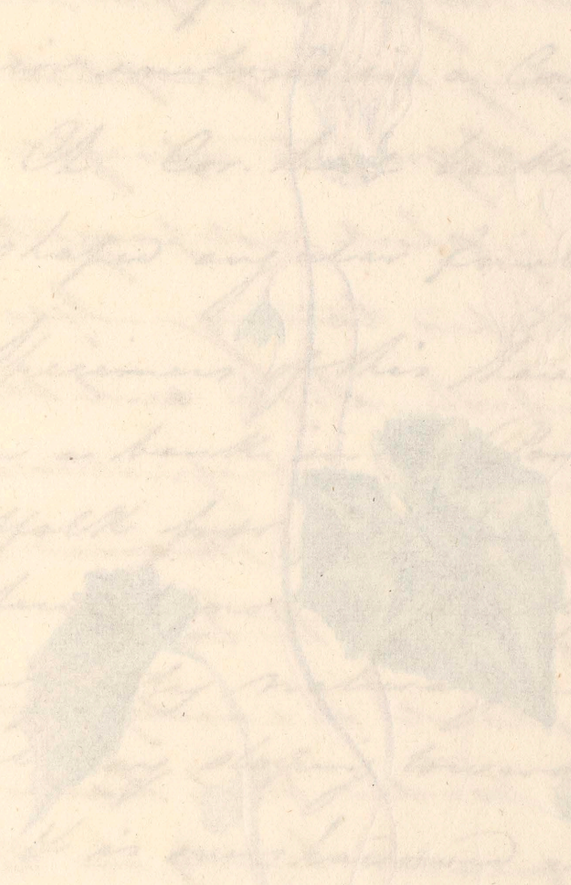
Pentandria Monogynia

Gen. Ch. Caps. 1 celled superior.
Tube of the Cor. cylindrical mouth
pervious. Stigma globose.
Spe. Ch. Leaves dentated wrinkled
Stalk many flowered Border of the
Cor. flat

This is much less frequent than the
2 most common kinds of primula
veris tho' occurs here & there in Woods
Thickets & pastures flowering in April
has a very grateful Smell.

In describing the Primrose we
expressed a Suspicion that the Ox lip
might be a variety of that rather than
of the Cowslip or possibly a hybrid be-
tween the 2. We are still more inclined
to the latter Opinion & that it has sprung
from a Primrose impregnated by a Cow-
slip - its external habit the contraction
towards the middle of the leaf & the umbel.
late flower stalk indicating (according to Lin.)
the father while the blossom itself both in
form Colour & scent resembles y. Mother

Cyclamen 12



Cyclamen europeum. Spring C. or Sowbread

Pentandria Monogynia

Gen. Ch. Cor. Wheel shaped reflexed tube very short orifice prominent — Berry superior enclosed in a Case —

Spec. Ch. Cor. bent backwards. Leaves heart shaped angular finely toothed

Wild Specimens of this have been sent us from a bank in the Parish of Bramley Suffolk not far from any house or Garden where if not originally a native it is perfectly naturalized — The Ground is a wet Clay sloping towards the South or West & is overshadowed with Trees — Gerarde was told that this Plant had been observed in Wales Lincolnshire & Somersetshire — It is perennial flowering in April & in a cultivated state sometimes in Autumn — Root a large roundish Knob throwing out several branched fibres — Leaves all radical on long foot stalks heart shaped roundish or

oblong acute waved & angular - finely ser-
rate or toothed veiny smooth — Stained
above with white radiated or sinuated
spots - purplish beneath — Footstalks rou
sizzag slender at the base — flower stalk
like them but longer simple naked —
Flowers drooping white purplish about th
mouth their Segments upright twisted
Stamina very short not projecting An-
thera oval shaped tawny — Germen su-
perior roundish - Style oval shaped. Stig
ma acute — After impregnation the Stalk
curls in a close Spiral manner & bury
the ripening fruit in the Earth

This pretty plant is easily cultivated
in a shady border & its leaves which
are in their greatest beauty in Autumn
are scarcely less ornamental than the
flowers. The root is very purgative &
has a nauseous bitter acrid taste not
at first perceived but very durable Ger-
arde believed that merely stepping over
this herb caused abortion & very prudently
guarded it in his Garden with Sticks

MENYANTHES nymphoides.

Fringed Buckbean.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* hairy. *Stigma* cloven. *Capſ.* of 1 cell.

SPEC. CHAR. Leaves heart-ſhaped, entire, waved. Corolla ciliated.

SYN. Menyanthes nymphoides. *Linn. Sp. Pl.* 207. *Hudſ. Fl. An.* 85. *With. Bot. Arr.* 206. *Relh. Cant.* 82. *Sibth. Oxon.* 73.

Nymphæa lutea minor flore fimbriato. *Raii Syn.* 368.

Limnanthemum peltatum. *Gmelin in Act. Petrop. anno* 1769, *v.* 14. *p.* 527. *t.* 17. *f.* 2. è MSS. Linn.

Waldſchmidia nymphoides. *Wiggers Flo. Holſat.* 20.

THIS beautiful aquatic is found occaſionally in the Thames, chiefly in little receſſes of its ſhores out of the great ſtream; Lord Lewiſham communicated it from near Walton bridge. It is much more frequent in the ſtill canals of Holland than with us.

Root perennial, long and ſtringy, as are alſo the ſtems. They produce a few pair of oppoſite floating leaves, growing on foot-ſtalks various in length according to the depth of the water, their margin ſcarcely toothed, but rather waved. Theſe leaves, like thoſe of the Nymphææ, perſpire quicker than almoſt any others we have obſerved, ſo as to become dry in a few hours, though at firſt ſo ſucculent. The flowers grow from the axillæ about Auguſt, in a kind of ſeſſile umbel, 4 or 5 together, on long foot-ſtalks, and when expanded in the ſun have a brilliant appearance. Their corolla is ciliated, but not hairy upon the ſurface like M. trifoliata: hence ſome have thought it did not anſwer to the generic character, and Wiggers has aſſerted that it belongs even to a different natural order from the laſt-mentioned plant, but without telling us why. As Mr. de Juſſieu, whoſe authority is very great upon ſuch a point, has not ſeparated them, and as M. indica ſeems to connect the two, we think they may ſafely remain as they are.

Menyanthes 13

Menyanthes trifoliata. Common Buckbean

Pentandria Monogynia

Gen. Ch. Cor. hairy. Stigma downy. Caps. of 1 cell.

Spec. Ch. Leaves ternate

very frequent in Watery Places in a boggy Soil

Fl. flowers in June & July

Root perennial long round thrusting out many fibres deep into the Mud. Stem creeping clothed with the sheathing footstalks each of which bears three obovate smooth bluntly toothed or waved leaflets. Flower stalk opposite to a leaf but springing from within its sheath longer than the leaves erect round smooth bearing a simple Thyrsus of about 10 or 15 flowers accompanied by ovate entire Bractea. Cal. with 5 blunt teeth Cor of 1 funnel shaped Petal deeply divided into 5 lanceolate acute segments

which are white tipped with red & clothed wi
long fleshy shaggy fibres on their upper side.
This constitutes the proper Char. of the Genus th
in some Species the hairyness is confined to th
Edge in others upon both parts see t 217. Anth
sagittate. Germen round Stigma cloven &
notched.

The Leek is very better an infusion of it wa
long ago recommended for the Rheumatism
It has been a popular Medicine in Englan
It has also been given for the Jaundice Scurvy Apo
Calculi & Dropsy a formidable list of Disa
ders — if it has any right to such celebrity it
must act as a powerful tonic

Dec.r 1. 1796. Published by J.r Sowerby London.

HOTTONIA paluſtris.

Water Violet or Featherfoil.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* ſalver-ſhaped. *Stamina* ſtanding on the margin of the tube. *Capſule* with 1 cell.

SPEC. CHAR. Stalk bearing many flowers in whorls.

SYN. Hottonia paluſtris. *Linn. Sp. Pl.* 208. *Hudſ. Fl. An.* 85. *With. Bot. Arr.* 207. *Relh. Cant.* 83. *Sibth. Ox.* 73. *Curt. Lond. faſc.* 1. *t.* 11. *Dickſ. H. Sicc. faſc.* 7. 7.

Hottonia. *Raii Syn.* 285.

CLEAR ditches and ponds on a gravelly ſoil, in various parts of England, are frequently adorned with the beautiful *Hottonia*, which may vie with many of the moſt admired exotics in elegance, having indeed, like ſome other European aquatics, very much the air of a tropical plant. Its Engliſh name, Water Violet, is far from apt, even though we underſtand it as contraſting this plant with the Dame's Violet, or *Heſperis*, to which its reſemblance is ſlight, and its affinity none, for it belongs to the ſame natural order as the Primroſe and Pimpernel.

The white fibrous radicles run deep into the ground, and from the crown of the perennial root ſpring ſeveral leaves in a ſtar-like form, and a few long runners, which are leafy and take root at their extremities, flowering the next year. The leaves are ſmooth, bright-green, elegantly and deeply pinnatifid, or pectinated, their ſegments linear and entire, varying in breadth, acute. All theſe parts are conſtantly under water. The ſtalk alone riſes above the ſurface to the height of 8 or 10 inches, being ſolitary, erect, round, naked, ſmooth below, roughiſh above, and bearing 5 or 6 whorls, each of 5 to 10 pedunculated flowers, with an oblong bractea at the baſe of each flower-ſtalk. The flowers are not unlike thoſe of a *Primula*. They are naturally 5-cleft, but may be found with 6 or 7 ſegments, and as many ſtamina. Their colour is pale purple, with a yellow tube and orifice. Capſule globular, with many ſeeds ſtanding on a large globoſe receptacle. Stigma concave. It flowers in June.

Boerhaave named this genus in honour of his predeceſſor in the Leyden Profeſſorſhip, Peter Hotton, of whoſe character and abilities he ſpeaks with great reſpect in his Index to the Leyden Garden.

Hottonia 14

761.

July 1. 1800. Published by J. Stanesby, London.

LYSIMACHIA vulgaris.

Yellow Looſeſtrife.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* wheel-ſhaped. *Capſ.* globoſe, pointed, with 10 valves.

SPEC. CHAR. Panicled. Cluſters terminal. Leaves ovato-lanceolate, acute.

SYN. Lyſimachia vulgaris. *Linn. Sp. Pl.* 209. *Sm. Fl. Brit.* 227. *Hudſ.* 86. *With.* 237. *Hull.* 49. *Relh.* 84. *Sibth.* 74. *Abbot.* 45. *Curt. Lond. faſc.* 5. *t.* 19.
L. lutea. *Raii Syn.* 282.

AN elegant ornament of watery ſhady places, and the reedy banks of rivers, where it intermingles with the Common Valerian, the *Eupatorium*, the *Lythrum Salicaria*, &c. but is much leſs common than any of them. It flowers in July, and, having a perennial creeping root, may be eaſily propagated in a garden, even where the ſoil is not very wet. In a moiſt one it would ſoon become a troubleſome weed.

The ſtems riſe to the height of 3 feet or more, and are ſtraight, leafy, panicled at the top. The leaves, though generally oppoſite only, very often grow 3 or 4 in a whorl, almoſt ſeſſile, of a broad lanceolate form, entire, veiny, frequently downy beneath. Cluſters from the boſoms of the uppermoſt leaves, joining to form a panicle of large handſome yellow flowers. Each partial flower-ſtalk has an awl-ſhaped bractea at its baſe. The diviſions of the calyx are pointed and fringed. Corolla ſpreading, divided almoſt to the baſe. Stamina ſmooth, united at the bottom, ſo as to be perfectly monadelphous. Seeds numerous and ſmall, not always perfected.

It ſeems moſt probable that this herb received its Greek name in honour of Lyſimachus, (as *Gentiana* and *Euphorbia* are ancient names of ſimilar origin,) and that Looſeſtrife is merely a tranſlation of it. The fable of the plant taming enraged animals, was probably, like many others, the invention of ſome perſon of more learning than wiſdom.

J.ᵉ Sowerby del.ᵗ May 1ˢᵗ 1794.

LYSIMACHIA thyrſiflora.

Tufted Looſeſtrife.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* wheel-ſhaped. *Capſule* globoſe, pointed, with 10 valves.

SPEC. CHAR. Flowers in lateral pedunculated cluſters.

SYN. Lyſimachia thyrſiflora. *Linn. Sp. Pl.* 209. *Hudſ. Fl. An.* 86. *With. Bot. Arr.* 209.

L. lutea, flore globoſo. *Raii Syn.* 283.

DESPAIRING of procuring recent wild ſpecimens of this very rare plant, we cannot refrain from exhibiting a figure of a cultivated one, which has been compared with wild ones, and found in no reſpect to differ. It grows in boggy places, about running ſtreams, and was found in Ray's time in the eaſt riding of Yorkſhire, as well as about King's Langley in Hertfordſhire. Dr. Smith ſaw, in the year 1781, ſpecimens gathered by Dr. White in a bog near Severus's hills at York; but the plant was then loſt, from the place having been drained, ſo that we really do not know a certain ſtation of this Lyſimachia at preſent.

It has a long root with whorls of fibres like many aquatic plants. The ſtem 10 or 20 inches high, erect, round, perfectly ſimple, ſlightly woolly, covered with oppoſite, lanceolate, entire leaves, which are pale beneath, and ſomewhat revolute. The bunches of flowers ſtand oppoſite, one from the boſom of each leaf about the middle of the ſtem, erect, pubeſcent, each of about ten flowers, on partial footſtalks, accompanied by ſolitary lanceolate bracteæ. The corolla is very deeply cloven into lanceolate ſegments, with a ſmall tooth between every two of them. The ſtamina are capillary, longer than the corolla, and oppoſite to its ſegments. Style ſimple. The calyx, germen, and tips of the corolla are prettily ſpotted with red. It flowers about midſummer, and may be eaſily known from all other Britiſh vegetables.

Lysimachia nemorum. Yellow
Pimpernel or Wood loosestrife

Pentandria Monogynia

Gen. Ch. Cor. Wheel shaped. Caps.
globose pointed with 10 Valves
Spec. Ch. Leaves ovate acute. Flowers
solitary Stem procumbent. Stamina
smooth

The pretty yellow pimpernel of the Woods
is a great ornament to moist shady
Groves flowering from the End of May
to Sept.r tho in the greatest perfection
& brilliancy about Mid.s? As the Sea
son advances its long trailing branches
hang elegantly over broken ground or
mossy Rocks among little trickling rills
while its neat shining myrtle like leaves
are interrupt.d & entangled with tufted
Hypnums or the smaller kinds of Fern
Root perennial. Stem procumbent or
pendent taking root from some of the
lower branches branched square red &
pellucid hairy. Leaves opposite on foot
stalks ovate entire veiny rather succulent
Every part of the herb is smooth – Flowers

on long slender solitary or many simple
often twisted Stalks. Cal. in 5 equal awl-
shaped Segments. Cor. Spreading divided
about half way or farther into 5 lobes
Filaments smooth shorter than the
Cor.a Style a little club. shaped with a
simple blunt Stigma Caps. superior
3 loboss of 1 cell bursting into 10 Valves
which often stick together in pairs or
irregularly in this as in other Species
Seeds several roundish

Lysimachus 15

528

Lysimachia nummularia. Money Wort
or creeping Loosestrife

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped. Caps. globose
pointed with 10 Valves

Spec. Ch. Leaves somewhat heart shaped
Flowers solitary. Stem creeping. Sta
mina glandular

Money wort or Herb twopence inhabit
similar places with the preceding Species
or rather the banks of wet ditches creeping
over the black boggy soil of very moist
meadows or on the margins of shady
rivulets flowering copiously in June
& July. Root perennial. Stems several
superficially prostrate & creeping quadrangular
but compressed mostly simple. Leaves rather
rounder paler & more undulated than
the last. Segments of the Cal. ovate poin
ted. Cor. pale lemon col.d divided almost
to the base. when magnified it is found
to be clothed with small glands standing
on footstalks as are also the stamina. The
anthera are arrow shaped. The stigma blunt
& notched. Capsule seldom perfected

Lysimachia

Anagallis arvensis – Scarlet Pimpernel

Pentandria Monogynia

Gen. Ch. Cor. Wheel shaped – Caps. bursting all round – Stamina hairy

Spec. Ch. Leaves ovate dotted beneath – Stem procumbent

A common Weed on all kinds of cultivated land flowering all Summer long every part of it is singularly beautiful & will repay the trouble of minute examination Root annual small – Stem procumbent much branched at the bottom – Square smooth Branches opposite rarely in fours. Leaves ovate entire smooth with ribs & several longitudinal Veins dotted all over the under side with purple – flowers axillary solitary on stalks longer than the leaves – Cal. leaves lanceolate with a membranous Edge very sharp pointed – Cor in 5 deep cut roundish Segments minutely crenate or somewhat fringed of a vivid Scarlet with purple at the base – Stamina

purple fringed with hairs of the same Color
Anthera Leaf shaped Yellow – Stigma blunt notch
Caps. globose greenish semitransparent burst-
ing in 2 equal hemispheres – Seeds many
angular thickly crowded into a globe ——

The blue Pimpernel is supposed to be a
permanent Variety of this – Ray mentions a
White one —— This pretty flower opens only
in fine Weather & closes infallibly against
Rain – hence it is called the poor Mans Wea-
ther glass & is one of the most certain that
can be consulted as we have often experienc

Anejallis 16

Anagallis tenella — Bog. Pimpernel

Pentandria Monogynia

Genlet. Cor. Wheel shaped — Caps bursting all round — Stamina hairy

Spec. Ch — Leaves roundish somewhat pointed on footstalks. Stem creeping

Stigma acute

This more elegant little Plant was sent us from Staffordshire by the Revd I Gisborne — its is not unfrequent in most Bogs throughout these Kingdoms flowering in July & Augt — Root perennial Stems spreading in every direction close to the Ground & taking root as they advance they are slender angular smooth clothed with opposite small roundish or ovate entire smooth leaves on shortish footstalks. Flowers erect on very long axillary solitary stalks — Cal. leaves lanceolate acute — Cor. of an elegant Rose Colr. deeply divided but with a tubular base &c

as to be rather funnel shaped— Stamina
clothed with numerous curiously jointed hairs
Antherae roundish— Style long tapering into a
simple acute Stigma— Caps. cut round no
often perfected—

Azalea 17

865

Azalea procumbens - Trailing Azalea

Pentandria Monogynia

Gen Ch Cor. bell shaped - Stamina regular inserted into the recep.e Caps capsular 5 celled

Spec Ch - Branches spreading & procumbent leaves opposite revolute very smooth

The heathy summits of all the highland mountains of Scotland are clothed with a profusion of this elegant little shrub The roots are woody branched & creeping running deep into the black moor soil in the fissures of the rocks Stems also much branched procumbent buried in moss intricate & tufted taking root occasionally as their base clothed with numerous opposite small elliptical entire revolute leaves very smooth shiny & evergreen standing on short broad foot-

stalks & marked above with a longitudinal fur-
row beneath by a projecting nerve — The
footstalks are often fringed Flowerstalks
forming a sort of terminal umbel each
having a concave bractea at its base & bearing
1 flower — Cal purplish smooth regularly 5
cleft — Cor. rose cold regular bell shaped with
a spreading 5 cleft border — Stamina equal
& regular shorter than the Cor. Anthers vi-
olet Style short straits Stigma capitate —
Caps. of 5 valves whose inflex margins divide
into 5 cells containing many Seeds —
The flowers appear early in July under
hair They are inodorous — The Caps ripen
in Augst.

March 1 1796 Published by J.t Sowerby London.

CONVOLVULUS arvenſis.

Small Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

SPEC. CHAR. Leaves arrow-ſhaped, the lobes acute. Flowers generally ſolitary. Bracteæ minute, remote from the flower.

SYN. Convolvulus arvenſis. *Linn. Sp. Pl.* 218. *Hudſ. Fl. An.* 88. *With. Bot. Arr.* 212. *Relh. Cant.* 86. *Sibth. Ox.* 76. *Curt. Lond. Faſc.* 2. *t.* 13. C. minor vulgaris. *Raii Syn.* 275.

BUT too common for the farmer and gardener in fields and all kinds of cultivated land, eſpecially in a gravelly ſoil, flowering copiouſly from May to the end of July.

The root is perennial, running ſo very deep into the ground, and growing ſo faſt, that it is next to impoſſible to deſtroy it. Stems very numerous, long, climbing and twining round every thing in their way, angular, ſlightly downy, not much branched except at the very bottom, clothed with alternate arrow-ſhaped leaves on downy footſtalks; the leaves are very various in breadth, entire, except one tooth ſometimes near the baſe, and a little downy. Stipulæ none. Flowers from the boſom of each leaf, ſolitary, on long (generally undivided) angular ſtalks ſwelling upwards, with a pair of minute bracteæ about their middle, which are downy, narrow, rather lanceolate than ſubulate, and ſometimes even obovate. Flowers very beautiful, roſe-coloured, varying with lighter or deeper ſhades and lines of crimſon, the plaits yellowiſh. They generally cloſe before rain; in dry warm weather they have a very ſweet almond-like ſmell. Calyx with a membranous edge, the leaves obtuſe, lying over each other. Antheræ red or white. Style not very long; ſtigmas nearly equal to it in length, linear, diſtant. The ſeeds happily are rarely perfected.

There is a ſingular variety mentioned by Ray, with a ſmaller flower, deeply divided into 5 ſegments, and of a darker red than the common kind. Dr. Smith has obſerved this in a hedge out of St. Giles's gates, Norwich.

April 1st 1796 Published by Jas Sowerby London

CONVOLVULUS Soldanella.

Sea Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

SPEC. CHAR. Leaves kidney-ſhaped. Flower-ſtalks ſingle-flowered, with membranous angles.

SYN. Convolvulus Soldanella. *Linn. Sp. Pl.* 226. *Hudſ. Fl. An.* 89. *With. Bot. Arr.* 214.

C. maritimus, Soldanella dictus. *Raii Syn.* 276.

A NATIVE of our ſandy ſea ſhores, as at Yarmouth, Loweſtoft, &c. The Rev. Mr. Baker and A. B. Lambert, Eſq. ſent it from Weymouth. The beautiful flowers may be found in July, not much later; they expand only in fine weather and in the early part of the day.

Root long, creeping, perennial. Stems procumbent, ſpreading in a circular form, 5 or 6 inches long, but little branched, angular, purpliſh. Leaves on longiſh foot-ſtalks, ſmall, dark-green, heart or kidney-ſhaped, entire, ſometimes a little angular. The whole herb is ſmooth and ſucculent. Flowers few and large, axillary, ſolitary, on long flower-ſtalks thickened upwards, and with 3 or 4 dilated membranous angles. Bracteæ large, ovate, cloſe to the flower. Calyx-leaves large, ovate. Corolla with five acute angles, roſe-coloured, the plaits yellowiſh. Antheræ yellow. Stigmas ſmall and ſharp. Capſule four-lobed.

April 1.st 1796 Published by Jn.o Sowerby London

CONVOLVULUS ſepium.

Great Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

SPEC. CHAR. Leaves arrow-ſhaped, the poſterior lobes lopped. Flower-ſtalks ſquare, ſingle-flowered. Bracteæ heart-ſhaped, cloſe to the flower.

SYN. Convolvulus ſepium. *Linn. Sp. Pl.* 218. *Hudſ. Fl. An.* 88. *With. Bot. Arr.* 213. *Relh. Cant.* 87. *Sibth. Ox.* 76. *Curt. Lond. faſc.* 1. *t.* 13. C. major. *Raii Syn.* 275.

THIS, one of the moſt elegant and graceful of all our wild flowers, is equally common with the preceding ſpecies, though its place of growth be different. It inhabits moiſt hedges, twining about willows and reeds, and decorating them with its very conſpicuous flowers throughout July and Auguſt.

The roots are long, creeping, and perennial, a little fleſhy. Stems very long, twining, ſomewhat angular, ſmooth, not much branched. Leaves alternate, on ſmooth footſtalks about half their own length, dependent, ſmooth, of a ſwelling arrow-ſhape, with the angles at the baſe abruptly cut off. Stipulæ none. Flowers ſolitary, on axillary, undivided, ſquare, curved ſtalks, with a pair of heartſhaped, red-bordered bracteæ, cloſe to the flower and enfolding the proper calyx, which is ſmaller, of 5 lanceolate leaves. Corolla generally white, but ſometimes (as Dillenius obſerves in Ray's Synopſis) of an uniform fleſh or roſe-colour. Antheræ cream-coloured. Stigmas ſhort and thick. Seeds ſcarcely ever perfected.

An extract of the herb is ſaid to be a violent purge, like Scammony.

Convolvulus 18

[313]

CONVOLVULUS Tepium.

Great Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. bell-shaped, plaited. Stigmas 2.
Capsule with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves arrow-shaped, the posterior lobes lopped. Flower-stalks 1-quare, single-flowered. Bractes heart-shaped, close to the flower.

SYN. Convolvulus Tepium. Linn. Sp. Pl. 218. Huds. Fl. Ang. 88. With. Bot. Arr. 273. Relh. Cant. 87. Sibth. Ox. 76. Curt. Lond. Fasc. 1. t. 13.
C. major. Ray Syn. 273.

THIS, one of the most elegant and graceful of our wild flowers, is equally common with the preceding species, though its place of growth be different. It inhabits moist hedges, twining about willows and reeds, and decorating them with its very conspicuous flowers throughout July and August.

The roots are long, creeping, and perennial. Stems very long, twining, sometimes angular, smooth, not much branched. Leaves alternate, on smooth footstalks about half their own length, deep green, smooth, of a dwelling arrow-shape, with the angles at the base abruptly cut off. Stipules none. Flowers solitary, or racemed, 1-quare, curved stalks, with a pair of heart-shaped, red-ordered bractes, close to the flower and enfolding the proper calyx, which is smaller, of 5 lanceolate leaves. Corolla generally white, but sometimes (as Dillenius observes in Ray's Synopsis) of an uniform bell or sole-colour. Anthers cream-coloured. Stigmas short and thick. Seeds scarcely ever perfected.

An extract of the herb is said to be a violent purge, like Scammony.

J. Sowerby del. April 1. 1791

POLEMONIUM cæruleum.

Jacob's Ladder.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* in five ſegments. *Stamina* ſtanding on five valves which cloſe the tube. *Stigma* three-cleft. *Capſule* three-celled, ſuperior.

SPEC. CHAR. Leaves pinnated. Flowers erect. Calyx longer than the tube of the corolla.

SYN. Polemonium cæruleum. *Linn. Sp. Pl.* 230. *Hudſ. Fl. An.* 89. *With. Bot. Arr.* 215.

P. vulgare cæruleum. *Raii Syn.* 288.

THIS, although very common in gardens, is one of the plants moſt rarely found wild in this country. Botaniſts of the laſt century gathered it in the romantic and mountainous country about Malham Cove, in the north of Yorkſhire, where it ſtill grows, as well as in ſome parts of Derbyſhire (*Withering*).

A variety with white flowers is very common, ſometimes even from the ſame root as the blue ones (*Linnæus*); the faint purpliſh blue ſeen in the flowers of this plant, being that which of all colours is moſt apt to vary to white.

Its ſtems riſe to the height of eighteen or twenty inches, ſeldom more. The root is fibrous and perennial.

This plant is abſurdly enough reckoned among the Valerians by the old authors, with which it has not the leaſt affinity either in appearance, botanical characters, ſenſible qualities, or medical virtues.

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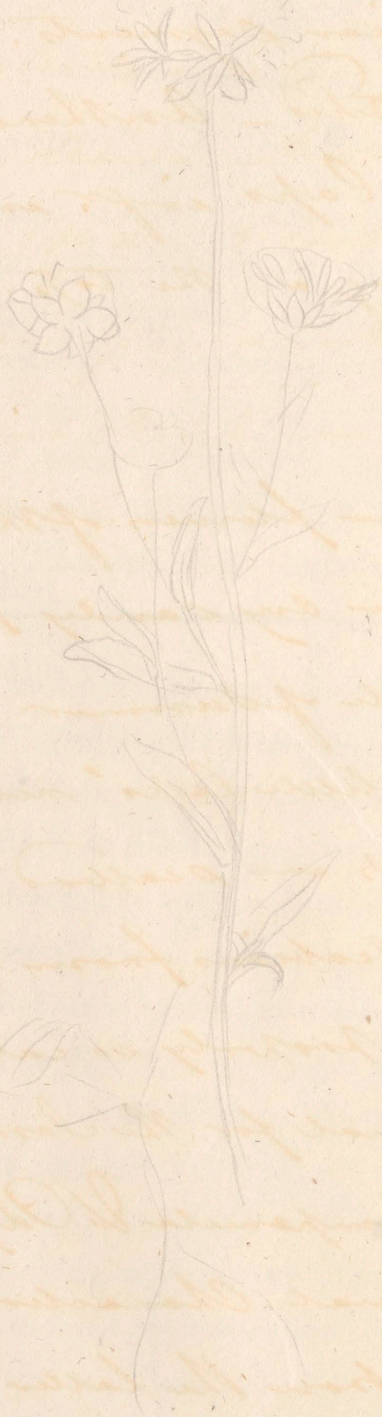

Iasione Montana — Sheps Scabious

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped deeply divided into 5 linear segments. Stigma club shaped notched — Anthers united at the base — Caps. inf. imperfectly 2 celled. bursting at the top.

Spec. Ch. ———

The prettily blue flowers of the Sheps S. are conspicuous in dry sandy fields & pastures in the middle of summer & in autumn the bladdery little caps. remain sometime after the seeds are scattered — It has obtained the name of Scabious from its resemblance to the Genus properly so called a resemblance merely external for the Iasione is nearer akin to Lobelia Campanula & Phyteuma in generalities & botanical characters being indeed distinguished from the latter only by the cohesion of its anthers & by the fruit being but imperfectly 2 celled. the partitions not reaching to the central column as in all others of this natural Order —

The Root is tapering a little woody &

annual— Stems several spreading scarce
by a foot high— hispy roundish rough branch
ed above— leaves oblong blunt waved en-
tire rough those on the Stem alternate
Flowers blue forming hemispherical heads
each of which stands on a permanent common
Calyx of many leaves— but every flowers has
its partial Stalk & a 5 toothed superr. Calyx
Central flowers often abortive Stigmata
more or less club shaped

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Campanula 21

Campanula rotundifolia – Round leav'd
Bell Flower
Pentandria Monogynia

Gen Ch – Cor bell shaped clos'd at the Bottom
by Valves bearing the Stamina – Stigma 3
cleft. Caps.e infer. opening by Lateral pores

Spec Ch – Radical leaves Kidney shaped
upper ones linear

Young Botanists are not unfrequently
puzzled by the name of this Campanula
if they find it as is not unfrequent with
only the linear leaves remaining & indeed
when it grows on a rich Soil among bushy
the round leaves soon disappear & a pro-
fusion of long narrow ones only cloath the
Stem It is one of our prettiest Wild flowers
found every where on Heaths Mouldering
Walls & bushy borders of Fields flowering
from July to the End of the Season

S. Sowerby del. Jan.y 1. 1792

CAMPANULA patula.

Spreading Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* three-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Leaves ſtraight; the radical ones nearly oval. Panicle ſpreading. Calyx denticulated.

SYN. Campanula patula. *Linn. Sp. Pl.* 232. *Hudſ. Fl. An.* 95. *With. Bot. Arr.* 216.

ONE of the rareſt Engliſh plants, gathered at Cobham in Surry, in the park of the late Lord Ligonier, by Dr. Smith. Mr. Woodward found it in the borders of Buddon wood, Leiceſterſhire; not in the wood itſelf, as has been commonly reported.

The root is biennial, ſlender, and white. Radical leaves growing many together, ſpreading, ſmall, roundiſh, or oval, ſoon turning yellowiſh; thoſe on the ſtem lanceolate, ſtraight, and even; not undulated, as in Campanula Rapunculus. The panicle is alſo much more ſpreading than in that ſpecies, and the bloſſoms fewer. The flowers appear in July; and as the herb, though milky and bitter, is frequently eaten down by cattle, ſide branches ſpring up, and flower till the winter froſts deſtroy the root. The corolla is of an elegant form, tapering at the baſe, but ſpreading in the rim. This ſpecies has no kind of affinity with the common C. rotundifolia; ſome of whoſe varieties, when their radical leaves are loſt, have been occaſionally miſtaken for it. It eſcaped the notice of Ray, but is admirably figured by Dillenius in his Hortus Elthamenſis, tab. lviii. f. 68.

1.1795 Published by J.t Sowerby London

CAMPANULA Rapunculus.

Rampion Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* 3-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Leaves undulated; the radical ones lanceolate inclining to oval. Panicle compact.

SYN. Campanula Rapunculus. *Linn. Sp. Pl.* 232. *Hudſ. Fl. An.* 95. *With. Bot. Arr.* 217.

Rapunculus eſculentus. *Raii Syn.* 277.

A NATIVE of banks and borders of fields in ſome parts of England, more particularly Surrey and Kent. It is an old kitchen-garden vegetable, the root having been formerly eaten either raw in ſallads or boiled. When recent it is the ſize and ſhape of a radiſh, but white, milky, ſweetiſh with ſome pungency and bitterneſs. It is now out of uſe.

Root biennial. Stem erect, angular, rough (eſpecially on the angles) with deflexed white hairs, the upper part being leſs rough, panicled and ſometimes branched. Leaves roughiſh, undulated and toothed; the loweſt ſomewhat elliptical, the others lanceolate; the floral leaves very narrow. Panicle compact, upright, its ſide branches bearing from one to three or more flowers. Germen in our ſpecimens ſmooth, in thoſe of Linnæus hairy, the hairs often inflated and becoming globular; teeth of the calyx very long and taper, generally entire, but ſometimes bearing one ſmall tooth on each ſide near the baſe, though they are by no means ſo denticulated as in C. *patula* (tab. 42), neither is the corolla taper at the baſe, as in that ſpecies, but inflated. The flowers appear in July and Auguſt.

J. Sowerby del. March 1. 1791.

CAMPANULA Trachelium.

Nettle-leaved Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* three-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Stem angular. Leaves on foot-ſtalks. Calyx fringed. Flower-ſtalks three-cleft.

SYN. Campanula Trachelium. *Linn. Sp. Pl.* 235. *Hudſ. Fl. An.* 96. *With. Bot. Arr.* 218. *Relh. Cantab.* 94.

Campanula vulgatior foliis Urticæ, vel major et aſperior. *Raii Syn.* 276.

FOUND in woods and hedges in a gravelly ſoil in various parts of Great Britain. The root is perennial; and the flowers, which are occaſionally found white, appear in the middle of ſummer. The ſtem is from two to three feet high, and the harſh rough leaves look very like thoſe of a nettle.

Of all our Britiſh ſpecies of Campanula, except the *rotundifolia*, this is the moſt common: the reſt may be reckoned among the rarer plants.

Fig. 1. Repreſents a ſtamen on its valve, ſeparate.

— 2. Seed-veſſel.

Feb.y 1796 Printed by J.Sowerby London

CAMPANULA latifolia.

Giant Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* 3-cleft. *Capſ.* inferior, opening by lateral pores.

SPEC. CHAR. Leaves ovato-lanceolate. Stem unbranched, round. Flowers ſolitary, pedunculated. Fruit drooping.

SYN. Campanula latifolia. *Linn. Sp. Pl.* 233. *Hudſ. Fl. An.* 96. *With. Bot. Arr.* 218. *Relh. Cant. Suppl.* 2. 10. *Lightf. Scot.* 141.

C. maxima foliis latiſſimis. *Raii Syn.* 276.

IN the north of England, and in Scotland according to Mr. Lightfoot, this ſpecies of *Campanula* is not unfrequent, though rare in the ſouthern counties. It grows in ſhady moiſt places, about the baſes of mountains. Mr. Roſe obſerved it in Forehoe wood near Kimberley, Norfolk. Our wild ſpecimen grew near Dunſtable, where it was firſt remarked and aſcertained by our obliging correſpondent the Rev. Mr. Abbot, for many botaniſts overlook this plant for C. *Trachelium*.

Root perennial, very milky as well as the whole herb. Stem 3 or 4 feet high, erect, ſimple, cylindrical or very ſlightly angular, leafy. Leaves alternate, nearly ſeſſile, large, roughiſh, paler beneath, doubly ſerrated. From the boſoms of the upper ones ariſe ſolitary naked flower-ſtalks, ſcarcely ever bearing more than one flower; we have not found the pair of "leaf-ſcales," or rather bracteæ mentioned in the Bot. Arr. Calyx ſmooth, ſerrated. Corolla large and handſome. The antheræ are not large, but afford plenty of pollen, which copiouſly adheres to the ſtyle.

This is ſometimes cultivated in gardens. It flowers in Auguſt, and is rather ornamental; occaſionally varying to white or pale roſe-colour.

90.

Js. Sowerby delt. Feb. 1. 1793

CAMPANULA glomerata.

Cluſtered Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* three-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Stem angular, ſimple. Flowers ſeſſile, moſt of them in a terminal cluſter. Leaves ovate.

SYN. Campanula glomerata. *Linn. Sp. Pl.* 235. *Hudſ. Fl. An.* 96. *With. Bot. Arr.* 219. *Relh. Cant.* 94.

C. pratenſis, flore conglomerato. *Raii Syn.* 277.

A NATIVE of dry chalky paſtures, as Gogmagog hills, Newmarket heath, the neighbourhood of Marham in Norfolk, Bury in Suffolk, and various parts of Yorkſhire, Surrey, and other chalk countries, which its conſpicuous flowers adorn very copiouſly in the months of July and Auguſt.

The ſtem is never (we believe) branched, unleſs it happens to have been eaten off by cattle when young; it is erect, angular, hairy, from ſix to eighteen inches high. Leaves rough, pale but not hoary, beneath; the calyx, and even corolla, are ſometimes hairy, and the latter occaſionally varies from purple to white. Root perennial, with long fibres.

This plant is no contemptible ornament for rock-work, or flower-borders in dry ground, where little elſe will grow. A moiſt or rich ſoil makes the herb too luxuriant, the flowers pale and degenerate, taking away its alpine habit.

370.

1795 Published by J.t Lowen.t London.

CAMPANULA hybrida.

Corn Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* 3-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Stem often branched from the baſe. Leaves oblong, crenate and undulated. Corolla rotate, ſhorter than the calyx. Capſule priſmatic.

SYN. Campanula hybrida. *Linn. Sp. Pl.* 239. *Hudſ. Fl. An.* 97. *With. Bot. Arr.* 219. *Relh. Cant.* 95. *Sibth. Ox.* 81.

C. arvenſis erecta, vel Speculum Veneris minus. *Raii Syn.* 278.

SENT by the Rev. Mr. Hemſted from Cambridgeſhire. It is found alſo in Norfolk and Suffolk, in corn-fields on a chalky ſoil, but by no means frequently, flowering towards autumn.

Root ſmall, fibrous and annual. Stem nearly erect, with a tendency to branch more or leſs at the baſe as well as in the upper part, very various in luxuriance, a little zigzag, angular, roughiſh, leafy. Leaves alternate, undulated, ſparingly crenate, rough, eſpecially on the margin. Flowers terminal, ſolitary, ſeſſile among a few leaves. Germen priſmatic, long, roughiſh. Calyx-leaves about half as long as the germen, lanceolate, revolute, hairy. Corolla very ſmall, rotate, half as long as the calyx-leaves, ſeldom fully expanded, pale purple. Style and ſtigma club-ſhaped, hairy.

Such is the deſcription of our plant, which will not be found to accord exactly with what Linnæus has ſaid. His remarks however agree with his original ſpecimen now before us, which is apparently a cultivated one, with very long linear calyx-leaves, and a very ſmall corolla. The ſtem too is upright and ſmooth. From the conſideration of many wild as well as cultivated ſpecimens of C. *Speculum* and *hybrida*, we are perſuaded they are varieties of each other, and that the calyx-leaves in both are very variable in length and breadth, as well as the corolla in ſize.

J. Sowerby del. Dec. 1792.

CAMPANULA hederacea.

Ivy-leaved Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* three-cleft. *Capſule* inferior, opening by lateral pores.

SPEC. CHAR. Leaves heart-ſhaped, five-lobed, on foot-ſtalks, ſmooth. Stem flaccid.

SYN. Campanula hederacea. *Linn. Sp. Pl.* 240. *Hudſ. Fl. An.* 97. *With. Bot. Arr.* 220. *Dickſ. Dried Plants*, 56.

C. Cymbalariæ foliis. *Raii Syn.* 277.

FEW plants exceed this Campanula in elegance, and yet it has never had the fortune to be well figured. The old authors repreſent its corolla very erroneouſly, and Flo. Dan. t. 330, is one of the worſt figures in every reſpect that can be. Our ſpecimens were collected on a bog near High-beech, Epping Foreſt, by Mr. Edward Forſter, junior. This ſpecies was never before found ſo near London, though not rare in moiſt woods in the midland and ſouthern counties, and very plentiful in Cornwall, from whence Francis Borone brought it to Mr. Dickſon for his Faſciculi of Dried Plants. Though a bog plant, it is capable of cultivation, and is almoſt naturalized under a magnificent ſhrubbery of Kalmias in Kew garden. It flowers throughout the ſummer.

Its roots are perennial, fibrous, and ſlender, ſprouting from various parts of the procumbent ſtems, which are matted together, and ſpread very far. The whole herb is pale, tender, and delicate, ſmooth, except a very few ſcattered hairs occaſionally found on ſome of the leaves. Flowers ſolitary, on long terminal footſtalks, a little drooping, fugacious, and ſoon withering after they are gathered. Segments of the calyx pointed and entire.

Linnæus's ſuſpicion of this being a hybrid plant (Am. Acad. v. 3. 55) is unwarrantable. He ſuppoſes it may have been produced from ſome Campanula impregnated by Veronica hederifolia, and gives for reaſon that its leaves are quite foreign to thoſe of others of its genus; yet ſurely they much more reſemble the radical leaves of C. rotundifolia than thoſe of this Veronica.

J. Sowerby del.t Nov.r 1, 1793

PHYTEUMA orbicularis.

Round-headed Rampion.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* wheel-ſhaped, in five linear ſegments. *Stigma* three-cleft. *Capſule* three-celled.

SPEC. CHAR. Flowers in a roundiſh head. Leaves ſerrated; the radical ones heart-ſhaped.

SYN. Phyteuma orbicularis. *Linn. Sp. Pl.* 242. *Hudſ. Fl. An.* 97. *With. Bot. Arr.* 220.

Rapunculus corniculatus montanus. *Raii Syn.* 278.

WE are obliged to Thomas Cornwall, Eſq. of Chaſt Park Surrey for this ſpecimen, gathered wild in that county, in ſeveral parts of which, as well as in Suſſex and Hampſhire, this rare plant is found abundantly on a chalky ſoil, and flowers about July or Auguſt. It is one of our more elegant and ſingularly conſtructed productions, and may be cultivated without trouble in a dry gravelly or calcareous ſituation, though we muſt own the rich blue of its flower-buds is moſt conſpicuous in a wild ſtate.

The long woody root branches near the ſurface of the ground into ſeveral diviſions, each bearing a denſe tuft of petiolated, ſmooth, veiny, ſerrated, or rather crenated, leaves, the firſt of which are heart-ſhaped, the reſt ovato-lanceolate, and from the centre of which ariſes a ſimple erect ſtem, ſlightly angular, and clothed with alternate lanceolate leaves, the uppermoſt of them very acute, and ſomewhat recurved. A ſingle round head of flowers ſtands erect on a few ovate, acute, ciliated bracteæ. The parts of fructification agree in ſtructure with the genus of Campanula, except that the corolla is divided to the very baſe, into five linear ſpreading ſegments, which in the bud cohere together, forming a curved horn, and ſeparating firſt at their lower part. Every part of the flower remains permanent, though faded, till the ſeeds are diſperſed, or longer. The herb is milky, but not acrid.

Phyteuma 22

Samolus 26

Samolus Valerandi — Brook Weed or
Water Pimpernel
Pentandria Monogynia

Gen Ch. Cor. Salver shaped 5 cleft with
intermediate Scales — Stam. inserted
into the Tube opposite to the segments
Caps. half inferior of 1 cell with 5 teeth
Spec. Ch. Leaves blunt Cluster many
flowered a small Bractea on each
flower Stalk

The Water Pimpernel is found as Linnaeus
mentions almost in every quarter of the
Globe & in very diffet latitudes — it is not
very common in England or Scotland it
occurs chiefly in clear Watery boggy pla-
ces upon a gravelly soil flowering in
July & is perennial — Root of many
simple fibres — whole herb smooth pale
green a little succulent about a foot high
Stem round terminating in one or more
long clusters of numerous white flowers
each on its own flower stalk in the
middle of which stands a small bractea

The leaves are alternate obovate Entire
Stamina included within the Corolla
which is a little longer than the Calyx
5 small scales between the lobes of the Co-
rolla form the essential Character of the
Genus - The Caps is rather more below
than above the Cal & opens with 5 small
teeth at the top

Lobelia urens — Acrid Lobelia

Pentandria Monogynia

Gen. Ch. Cor irregular slit longitudinally on the upper side. Stigma capitate & the-cell united into a tube. Caps. infr with 2 or 3 cells.

Spec. Ch. Stem upright. Lower leaves obovate upper ones lanceolate all toothed. Flowers racemose downy.

A very rare Plant never yet found out of Devonshire. It is perennial growing on heaths among small shrubs & flowering about Sept. Root creeping fibrous increasing by offsets. Stem about a foot high branched hairy angular roughish but not hairy. Leaves all irregularly toothed rather than serrate alternate the lowest obovate. Flowers in very long terminal simple bracteated spikes or clusters. Cal. of 5 linear rough spreading leaves. crowning the furrowed roughish germen. Cor. of a full purplish blue rough

with minute points. Stamina protruding
Thro' the fissure of the Cor. Their filaments
in the upper part as well as the Anthers a-
rolled into a tube. Stigma deflexed its head
cloven. Ovarium in perfection & spring. Fringed
beneath with short hairs. Caps. 2 celled
Seeds numerous small. Herb milky
salad & very acrid —

J. Sowerby del. Oct.r 1793.

LOBELIA Dortmanna.
Water Lobelia.

SYNGENESIA Monogamia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* of one petal, irregular. *Capſule* inferior, with 2 or 3 cells.

SPEC. CHAR. Leaves linear, 2-celled, entire. Stem almoſt naked.

SYN. Lobelia Dortmanna. *Linn. Sp. Pl.* 1318. *Hudſ. Fl. An.* 377. *With. Bot. Arr.* 950. *Lightf. Fl. Scot.* 505, t. 21.

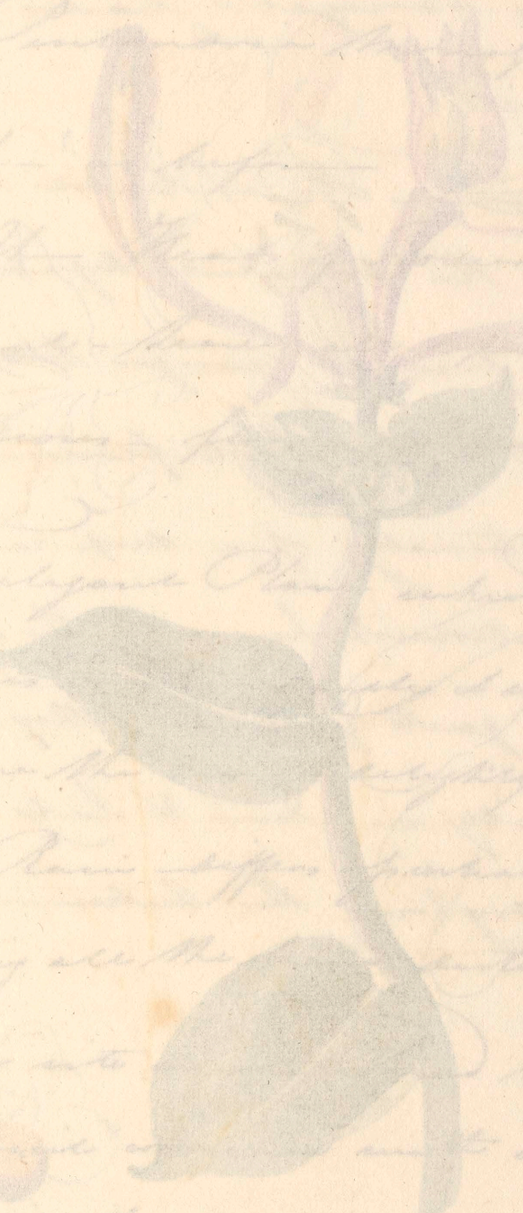
Gladiolus lacuſtris. *Ger. em.* 105. Dortmanni. *Raii Syn.* *287.

THE beautiful lakes of Weſtmoreland and Cumberland abound with this elegant and ſingular plant. Their gravelly bottoms are generally covered with thick tufts of its leaves, the flowering part of the ſtem being all that riſes above the water; ſo that in ſudden floods it is ſometimes entirely overflowed, not having, like ſome vegetables, the means of accommodating itſelf to ſuch quick changes, either by a more or leſs inclined poſition, or a ſpiral ſtructure. Dr. Woodville favoured us with this recent ſpecimen from Keſwick Lake. The plant grows alſo in Wales and Scotland, flowering in July.

Root of long ſimple whitiſh fibres, perennial. Leaves almoſt wholly radical, linear, entire, and very blunt, recurved, ſmooth, chiefly remarkable for their internal ſtructure, as they conſiſt of two longitudinal hollow cells with a partition between. Stem erect, ſimple, varying in length according to the depth of the water wherein it grows, round, ſmooth, hollow, terminated by a ſimple upright looſe ſpike or racemus of elegant pale purpliſh drooping flowers, ſtanding on ſhort foot-ſtalks with a ſmall blunt bractea at the baſe of each. The ſegments of the corolla are ſlightly bearded at their baſe, as are the antheræ at their tip. The ſtigma too is ciliated. The germen in ripening becomes erect; an example, among innumerable others, ſhewing it is not the weight of drooping flowers that makes them take an inclined poſition; the fruit of ſuch, though much the heavier, being almoſt always upright, for the ſeeds are thus more ſurely retained till ripe, and then more extenſively ſcattered; whereas by the inclined corolla, or rather, in this genus, by the incurved figure of the antheræ themſelves, the pollen is ſheltered from wet.—This herb abounds with milky juice.

Lobelia 24.

Londera 25



800.

Lonicera Periclymenum – Common

Honeysuckle or Woodbine

Pentandria Monogynia

Gen. Ch. – as before

Spec. Ch. – Heads of flowers ovate imbricated terminal – leaves all opposite ~~singent~~ deciduous – flowers ringent

This elegant Plant which decorates our hedges so abundantly & whose flowers perfume the air so delightfully in an Evening or after Rain differs specifically from the last in having all the leaves distinct – The flowers collected into an ovate Head not axillary & the fruit crowned with a 5 toothed Calyx instead of the nearly entire rim of the other. The Berries are also rounder of a darker red & often roughish. The twining Stems climb to a considerable height upon Trees & bushes. The leaves are entire for the most part opposite generally of a full green & smooth colour

beneath often having & in that case they are
all over of a lighter hue — There sometimes
occurs a remarkable Variety with respect
to generally variegated leaves called the
Oakland H.

The common H. is liable to many
Variations in the different degrees of shading
of its leaves fruit & younger branches — as
well as in the Colr. of its flowers which
are either externally of a deep red or altogether
of a pale yellowish hue — by the Sea side
they are often quite green — They all flower
most plentifully in June & July — but occa-
sionally throughout the Autumn also —

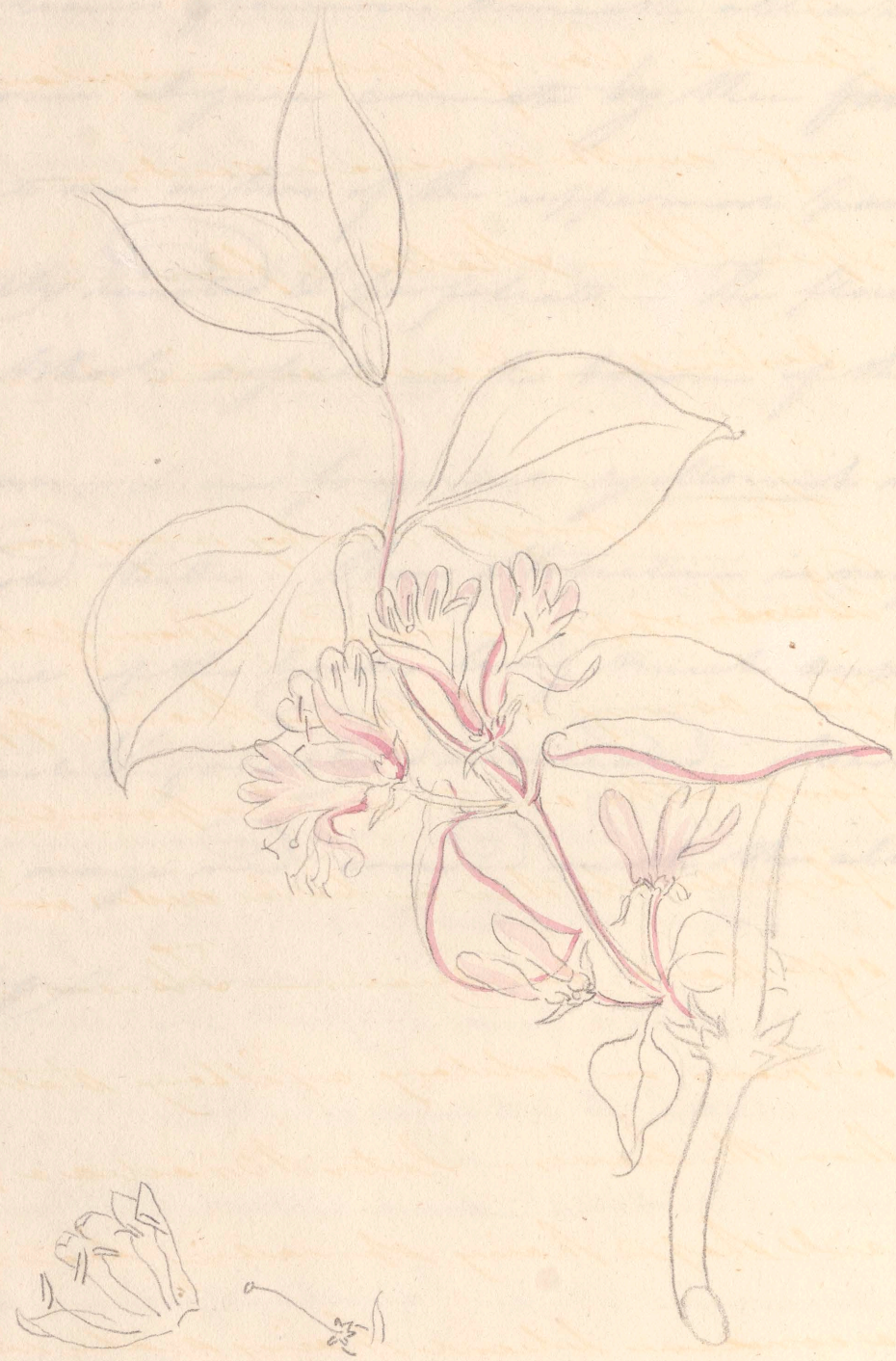
Lonicera caprifolium – Pale perfoliate
Honeysuckle

Pentandria Monogynia

Genl Ch Cor. of 1 Petal irregular
Berry inf.r of 2 cells with several Seed
Spec. Ch Flowers verticillate whorled
terminal Leaves deciduous the upper
united & perfoliate

The first information of this as a Na-
tive of Britain was communicated by
the Rev.d J. Butts. who found it plentifully
in a Wood near Elsfield Oxfordshire – I
hesitated to admit a Plant so common
in Gardens – but Mr Relhan having
discovered it in Cambridgeshire in his opi
nion certainly wild I could no longer
refuse it a place – It has probably
been overlooked as one of the many Varie
ties of the common H. from all which
however it is perfectly distinct & easily
to be known by the perfoliate upper leaves

It flowers in May or June — The
woody twining Stem climbs upon Bushes
or Trees & is clothed with opposite entire
smooth leaves & tendrils beneath all which
are in some degree connate by their foot-
stalks but one or two of the uppermost pairs
are perfectly united & perfoliate — The flowers
grow in Whorls seperate in the bosom of their
upper leaves — & are fragrant yellowish with
a blunt cold. tube. Their Structure is regular
one Segment of the border being much deeper
than the rest & greatly divaricated — Berries
elliptical orange red crowned with the almost
entire Calyx —



Lonicera Xylosteum — Upright Honeysuckle

Pentandria Monogynia

Gath. Cor. of 1 petal irregular — Berry
inf. with several seeds —
Spec Ch — Stalks 2 flowered. Berries
distinct — leaves entire downy

Stem upright bushy very much branched
Branches opposite round Most of the present
Year downy & hairy — leaves opposite on
footstalks ovate rather pointed entire
flexible clothed on both sides with short
soft hairs deciduous — Flowers inodorous
in pairs on solitary axillary stalks shorter
than the leaves — Outer Bracteæ a pair of
awl shaped hairy spreading leaves — inner
a concave blunt hairy scale under each
germen — Cal. in 5 obtuse lobes. Cor. yellow
inclining to white often tinged with red downy.
upper lip 4 cleft lower undivided — Stami
na equal downy. shorter than the Cor. Berries
oval red & separate 1 Cell. juicy with 6 or more seeds
flowers in July

May 1st. 1797 Published by Jas. Sowerby London.

VERBASCUM Blattaria.

Moth Mullein.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* wheel-ſhaped, a little irregular. *Capſ.* with one cell, and two valves.

SPEC. CHAR. Leaves embracing the ſtem, oblong, ſmooth, ſerrated. Flower-ſtalks ſingle-flowered, ſolitary.

SYN. Verbaſcum Blattaria. *Linn. Sp. Pl.* 254. *Hudſ. Fl. An.* 91. *With. Bot. Arr.* 229.

Blattaria lutea. *Raii Syn.* 288.

FOUND by Mr. Jacob Rayer on a bank about 3 miles from Rocheſter, near the river Medway, in which neighbourhood it is mentioned as growing in Ray's time. We are enabled by means of this wild ſpecimen to remove Dr. Stokes's doubt in the *Bot. Arr.* whether the true V. *Blattaria* be an Engliſh plant or not. In gardens it is frequently cultivated, and very ornamental, flowering from July to November, or even later, if the weather be mild.

Root annual, fuſiform. Stem 3 or 4 feet high, branched, leafy. Radical leaves ſlightly pinnatifid; ſtem-leaves ovate, or oblong, pointed, embracing the ſtem; all ſmooth, veiny, unequally or doubly ſerrated. The upper ones gradually diminiſh into pointed *bracteæ*, from each of whoſe boſoms ariſes a ſolitary ſimple ſlender flower-ſtalk, bearing one handſome yellow flower, ſtreaked more or leſs with purple. The calyx is in 5 nearly equal ſegments. Stamina clothed with purple hairs. Germen globoſe. Capſule rather oblong. The upper part of the ſtem, as well as the germen, calyx, bracteæ and upper leaves, are clothed with ſhort hairs tipped with a minute globe.

We have been favoured by the Hon. Mrs. F. Howard with a ſpecimen gathered in Norfolk, near Lynn, which is either a variety of this plant with a large purpliſh flower, or the V. *phœniceum* of Linnæus; we have not yet been able to determine which.

VERBASCUM nigrum.

Dark Mullein.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-ſhaped, a little irregular. *Capſule* with one cell, and two valves.

SPEC. CHAR. Leaves oblong-heart-ſhaped, on footſtalks.

SYN. Verbaſcum nigrum. *Linn. Sp. Pl.* 253. *Hudſ. Fl. An.* 90. *With. Bot. Arr.* 226. *Relh. Cant.* 88.

V. nigrum flore parvo, apicibus purpureis. *Raii Syn.* 288.

BY what figure of ſpeech this beautiful plant can be called *black*, not having a particle of that colour about it, we will not determine. All the old botaniſts, however, have ſo denominated it; and if they had any meaning, it can only have been that it was *not white*.

Its dark-green leaves are ſometimes hoary beneath, eſpecially the upper ones. The racemus of flowers is longer and more ſimple than in moſt of the other ſpecies. Nothing can be more elegant than the purple ſtamina contraſted with the yellow corolla.

This ſpecies loves a gravelly ſoil, and is not rare in Norfolk and Suffolk. It is very conſpicuous at a diſtance under hedges in green ſhady lanes, to which it is a great ornament. The flowers appear about Midſummer, and laſt till September. The root is perennial.

Verbascum pubescens Lam. — Yellow
Woolly Mullein
Pentandria Monogynia

Gen. Ch. Cor. wheel shaped a little irregular. Caps. with 2 cells & 2 Valves

Spec. Ch. Leaves oblong-ovate slightly serrated mealy on both sides. Stem round panicled

Gathered by Mr I Wagstaff at Norwich about which Town as well as Bury & some other parts of Norfolk & Suffolk this beautiful plant grows plentifully in waste ground hedges & the borders of Fields. It is biennial flowering in July at which time if not previously broken or damaged it forms a golden Pyramid a Yard high of many kinds of flowers & is one of the most magnificent of British herbaceous Plants

The leaves are often above a foot long & of a some
what elliptical pointed form those on the stem mo.
ovate & sessile all of them slightly serrated & clothed
on both sides with white mealy down — which ea
sily rubbs off & when seen in a Microscope is foun
to consist of numerous starry entangled tufts. The
Stem is round not angular as in the true V.
Lychnitis t 58. mealy as well as the Cal. forming a
pyramidal branched panicle. The flowers are
clustered on its branches. Cor. large bright Yellow
Stamina scarlet bearded with pale or white hairs
In some places as Hellesdon near Norwich
a Mule Plant is engendred between this & V.
nigrum having the habit of the former & flowers
with purple Stamina like the latter

VERBASCUM Lychnitis.

White Mullein.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-ſhaped, a little irregular. *Capſule* with one cell, and two valves.

SPEC. CHAR. Leaves oblong-wedge-ſhaped, nearly ſmooth on the upper ſide.

SYN. Verbaſcum Lychnitis. *Linn. Sp. Pl.* 253. *Hudſ. Fl. An.* 90. *With. Bot. Arr.* 225 β.

V. flore albo parvo. *Raii Syn.* 287.

GATHERED in lanes about Dartford in Kent, flowering in June. It loves a chalky ſoil, and is moſt frequent in that county.

Our ſpecimens agree preciſely with that in the Herbarium of Linnæus, which we learn, from certain marks and numbers, to be what he intended in the 1ſt edition of *Species Plantarum* for V. Lychnitis, though even in that work he ſeems to reckon our hoary yellow Mullein as the original ſpecies, making the white a variety.

This Mullein is remarkable for its ſtraight, wand-like, angular ſtem; its leaves very white beneath, but green with a ſlight hoarineſs above; and its cream-coloured flowers, which are produced in great numbers in a compound, cluſtered, terminal racemus, one of the lateral branches of which is all our figure would admit.

The yellow hoary Mullein is ſurely a very diſtinct ſpecies, its leaves being, on both ſides, covered with thick wool—not to mention other differences.

Verbascum Thapsus — Great Mullein

Pentandria Monogynia

Gen. Ch. Cor. wheel Shaped. a little ir
regular Caps. sup. with 2 cells & 2 valves
Stamina bearded

Spec. Ch. Leaves decurrent woolly
on both Side — Stem simple

Frequent on banks Ledges or waste Ground
especially on a gravelly or calcareous Soil
flowering in July & August. Root bi-
ennial Spindle Shaped. Stem erect sim
ple stiff & straight from 3 to 5 feet high hoary
angular woolly winged. Leaves alternate
decurrent oblong nearly entire very thickly
clothed on both sides with white branched
intricate woolly hairs. Spike terminal er-
ect cylindrical dense many flowered
flowers sessile closely set bright yellow
rarely white. Stamina Yellow hairy An-
thera red. Stigma Club Shaped — Mr
Robson communicated to Dr Withering
a male Plant produced under his own
Eyes from this Species impregnated by V. N.

indeed no Genus is more apt to engende
ourt than this—

a Pint of Cows Milk with a handfu
of the leaves of this Mullein or V. pulverulen
tum t 487. boiled in it to ½ a pint sweeten
with Sugar strained & taken at Bed time
is a pleasant emollient & nutritious Me
dicine for allaying a Cough & more par-
ticularly for taking off the pain & irrita-
tation of the Piles— The whole Herb is
mucilaginous & a little narcotic —

Orobanaceæ 26

Verbascum virgatum. Large flowered Mullein

Pentandria Monogynia

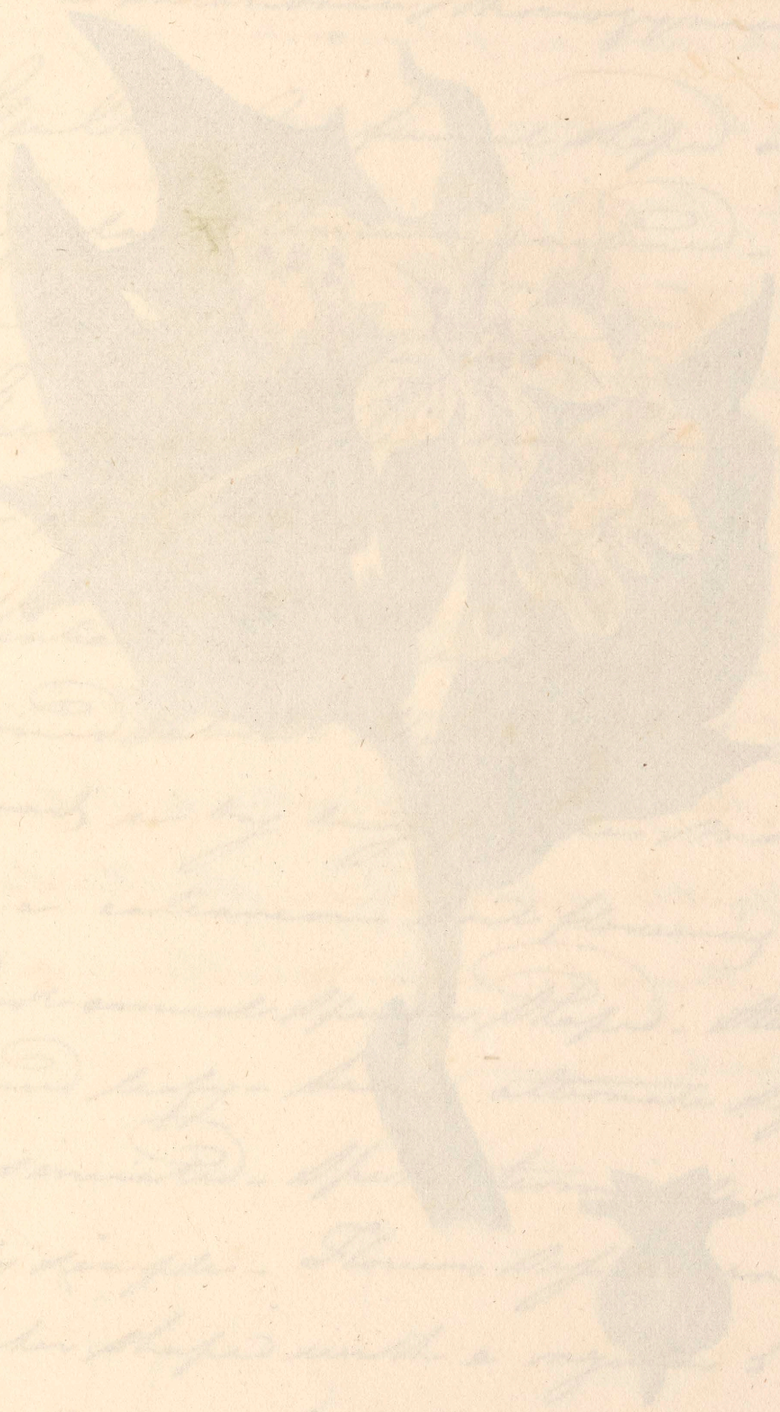
Gen. Ch. Cor. wheel shaped a little irregular. Caps. supr. with 2 cells & 2 Valves. Stamina bearded

Spec. Ch. Leaves oblong lanceolate dentate sessile the radical one somewhat lyrate downy. Stem branched flowers clustered nearly sessile

The Root is thick branched - Whole plant much larger & stronger than V. Blattaria clothed generally all over & the lower leaves constantly with short prominent often forked & tandular hairs. Stem 5 or 6 feet high branched from the bottom leafy round but somewhat angular or winged from the leaves running down it. Radical leaves resembling those of the Orein rose but somewhat larger & more or less lyrate those on the Stem oblong lanceolate doubly dentate sessile & in some degree embracing the Stem. Flowers axillary clusters on short woolly stalks & some

of them depile large yellow purple about
the Centre soon falling off Segments of the
Cal. ovate larger & broader than in V. B.
Stamina yellow bearded in the middle
with purple—

Hyoscyamus 27



Hyoscyamus niger — Common Henbane

Pentandria Monogynia

Gen. Ch. Cor. funnel shaped obtuse irregular Stamina inclined — Caps. with a lid 2 celled

Spec. Ch. Leaves sinuated embracing the stem — flowers axile

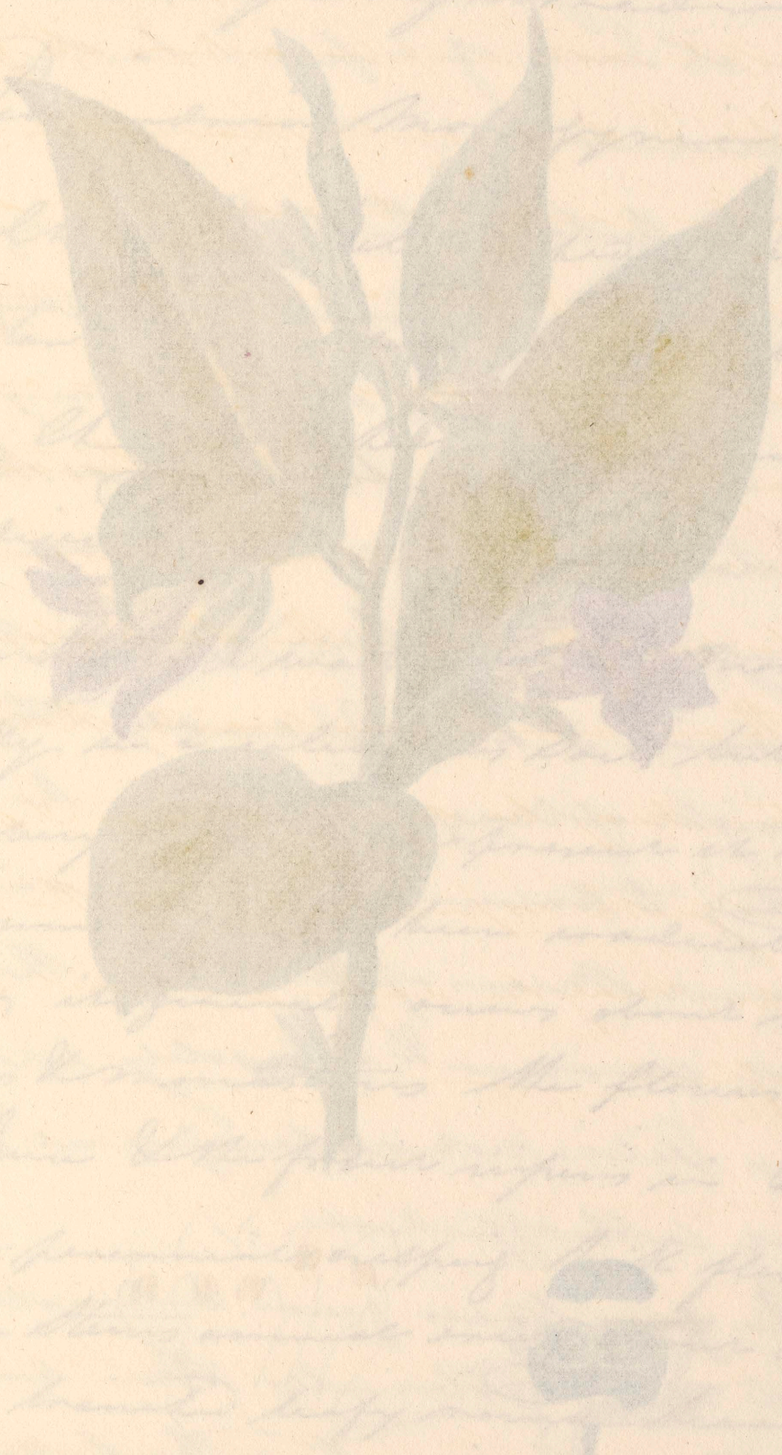
Henbane is not uncommon in waste ground about Villages & the sides of Roads in dry sandy places most especially on a calcareous soil flowering in July Root annual Spindle Shaped — Stem bushy round leafy — leaves alternate Petiole short sinuated — Spikes terminal recurved leafy simple — Flowers Axile erect Calyx bell shaped with a regular 5 cleft border inclosed with the permanent Cor straw coloured most elegantly pencilled with a Net work of purple Veins Anthers & Style purplish Caps. closed with the body of the Calyx divided into 2 cells & closed with a convex

smooth lid Seeds numerous

The Whole Plant is downy viscid & extre
ly fetid The a slight degree of its odour is
some people not unpleasant its qualiti
are highly & dangerously narcotic but
many other poisons it may under skilful
management prove a useful Medicine

The Seeds & Capsules smoked together are in so
places a popular remedy for the tooth ach
but Convulsions & temporary insanity som
times follow its use The Seeds alone abou
ing with oil which combinants their noxio
properties may be safely eaten as I have fo
in my youth experienced — So the Seeds
the Poppy may be eaten without any
other effect

October 20

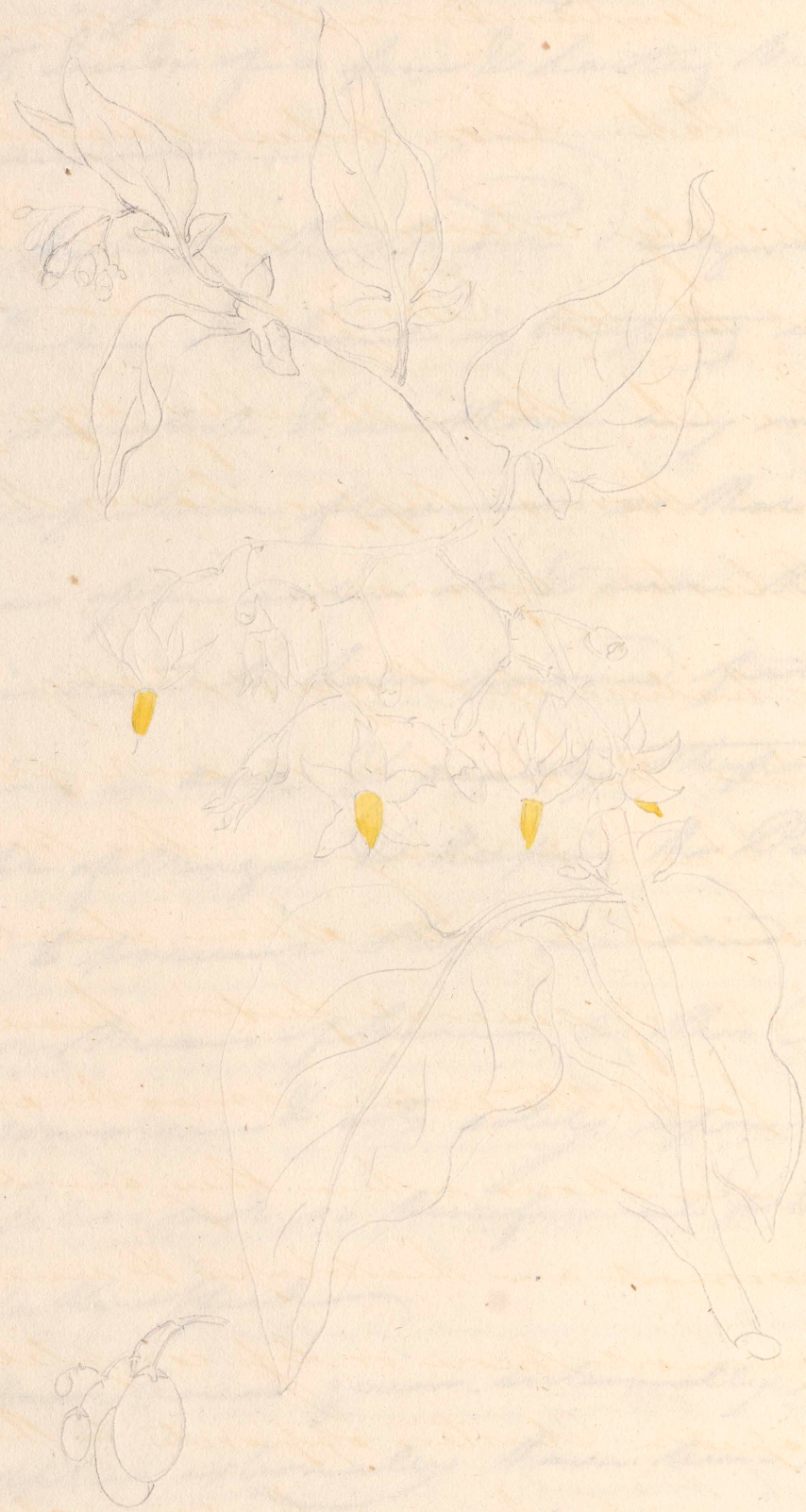


Atropa Belladonna Dwale or
Deadly Nightshade
Pentandria Monogynia
Genth Cor. Bell shaped. Stamina
distant Berry sup. of 2 cells
Spe. Ch Stem herbaceous leaves ovate
undivided
In Hedges & waste ground more espe-
cially in a calcareous Soil but happily
not very frequent at present it having
by common consent been eradicated gen-
erally it generally occurs about ruined
Castles & monasteries The flowers appears
in June & the fruit ripens in August
Root perennial creeping thick fleshy white
both — Stems annual erect about 3 feet
high branched hairy round — leaves lateral
in pairs one smaller than its companion
ovate entire of a dull green — Flowers on
solitary simple or axillary flower stalks droop-
ing Cor. of a dull purplish hue tinged

expression of the buried poisonous tuber to
which it belongs Berry about the size of
a small Cherry but flatter of a shining
black its Juice of a fine & lasting violet
Seeds numerous—

This is perhaps the most dangerous
Bros. Park — Its fruit is tempting in ap
pearance sweetish & without any nau
seous or repulsive flavour so that Chil
dren have often eaten it & even half
a Berry is said to have proved fatal
it occasions a deep & deadly stupor
A draught of Vinegar & keeping the Patien
walking to prevent Sleep are said to
be the most likely means of Cure as this Poison
is not corrosive & acts solely upon the
Nerves Oil is not so beneficial & Emet
do not take effect—

The ~~fo~~ leaves given internally in a
wine & applied externally have been rec
mended in Cancers but the Sufferings of
the Patient under the smallest dose
Dreadful—



Solanum Dulcamara. Woody
Nightshade or Bittersweet

Pentandria Monogynia

Gen Ch. Cor. wheel shaped, Anthers
slightly coherent opening by 2 pores
at the top. Berry superior 2 celled

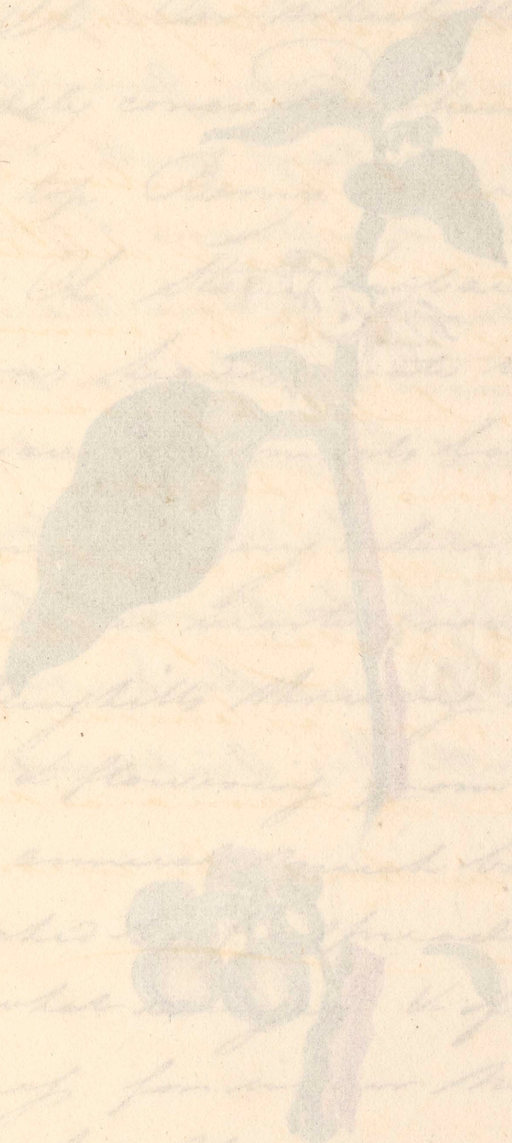
Spe. Ch. Stem shrubby zigzag with
out thorns. Upper leaves hastate
Clusters cymose

A native of Hedges & shady Places
where the Soil is moist flowering
in June & July — The woody
branched twisted Stem climbs to the
height of several feet. Leaves alternate
on footstalks entire smooth except on
the Sea shores where they are laciny the
lowermost are heartshaped & undivided the
uppermost more or less completely halbert
shaped — Clusters opposite to the leaves or
terminal — having the general appearance
but not the structure of a Cyme drooping
Flowers very elegant purple with 2
green dots at the base of each segment &
large yellow anthers — Berries oval scar
let very juicy bitter & poisonous

The young branches or the root employed
in a decoction are much celebrated by
some Practioners for removing various
obstructions promoting expectoration &
are useful in obstenate Coughs as well
as Rheumatic Disorders.

This Medicine is to be cautiously admi-
nistered in Small Doses & diluted with
Milk especially in the beginning as
being sometimes liable to produce Vo-
miting Convulsions & delirium (Woodv
Mr Saunders author of an elegant
introduction to Botany published in 9
has in the course of an extensive Countr
for a time used the Dulcamara with
great Success & without the inconvenien
just Mentioned

Solanum 29



Solanum nigrum Garden Nightshade

Pentandria Monogynia

Gen Ch. Cor. wheel shaped. Anthers
slightly connected. opening by 2 pores at
the top. Berry superior 2 celled

Spec. Ch. Stem herbaceous without
thorns leaves ovate bluntly toothed
& waved - Umbels lateral drooping

Common every where in cultivated
as well as waste ground especially
on dunghills flowering most in a rich
soil & flowering from June to Sept.
Root annual much branched - Stem
branches hairy spreading angular
somewhat winged & often of a woody
hardness for in our mildest Winters
as in hot climates it survives the Winters
leaves alternate on footstalks ovate waved
lengthened out at the base somewhat down
Umbels lateral from the intervices of the
Stem between the leaves drooping downy
bearing a few white musky scented flow
ers. Berries black globular - Hudson
mentions their berry sometimes Yellow

The whole Plant is called Narcotic celebrated for promoting perspiration & urine but to be used with great Caution An infusion of from 1 to 3 Grns of the dried leaf is said to be amply sufficient for a dose a larger Quantity occasioning violent Sickness with Head ache Giddyness & other dangerous Symptoms An ointment made of Hen leaves & Hogs Lard was used by Solano de Luque a famous Spanish Physician about 2 Centuries since in the Cure of Consumption The Patient was to be buried for some time up to the Chin in the Earth & afterwards rubbed with this Ointment —

Sept.r 1. 1797 Published by J.s Sowerby London.

CHIRONIA Centaurium.

Common Centaury.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* ſalver-ſhaped. *Stamina* inſerted into the tube. *Antheræ* becoming ſpiral. *Style* declining. *Seed-veſſel* of two inflexed valves.

SPEC. CHAR. Stem herbaceous, dichotomouſly panicled. Leaves ovato-lanceolate. Calyx ſhorter than the tube.

SYN. Chironia Centaurium. *Curt. Lond. faſc.* 4. *t.* 22. *With. Bot. Arr. ed.* 3. *v.* 2. 255. *Sibth. Ox.* 75. *Woodv. Med. Bot. t.* 157.

Gentiana Centaurium. *Linn. Sp. Pl.* 332. *Hudſ. Fl. An.* 102. *Relh. Cant.* 100. *Dickſ. H. Sicc. faſc.* 7. 3.

Centaurium minus. *Raii Syn.* 286.

A FREQUENT inhabitant of dry gravelly or chalky paſtures, ſcarcely to be cultivated in a manured ſoil, flowering in the latter part of ſummer; its bloſſoms cloſe as ſoon as gathered, and againſt rain.

Root ſmall, branching, annual. Stem ſolitary, erect, about a foot high, with 4 ſharp edges, leafy, terminating in ſeveral oppoſite, forked, flowering-branches, which altogether form an upright panicle. Leaves oppoſite, ſeſſile, entire, 3-nerved, the radical ones ſomewhat ſpatulate, the reſt lanceolate or elliptical. Each flower is ſeſſile, erect, with a greeniſh tube, and beautiful pink-coloured poliſhed limb. Segments of the calyx narrow and ſharp, about half as long as the tube, to which they adhere. Antheræ incumbent, twiſting into a ſpiral form as they ripen, which is eſſential to a true *Chironia*, though not obſervable in all that Linnæus has called ſo; ſee *Icones pictæ plant. rar. tab.* 18. The ſtyle is declining; ſtigma capitate, with a tranſverſe notch. The whole herb is ſmooth, very bitter, well known among ruſtic practitioners as a ſtomachic by the name of Leſſer Centaury.

Mr. Curtis firſt referred this plant to its right genus, but neglected to give it a ſpecific character, the definition for which Dr. Sibthorp quotes him having been given by Linnæus, and intended to diſtinguiſh it from other ſpecies of *Gentiana*, not of *Chironia*. Botaniſts are often ſtrangely incorrect about eſſential characters. They indeed require genius and accuracy, but they are the perfection of the art.———Dr. Stokes has made ſeveral excellent remarks on this plant in the 2d edition of Withering.

Chimici 30.

ronia pulchella. — Dwarf branched Centaury

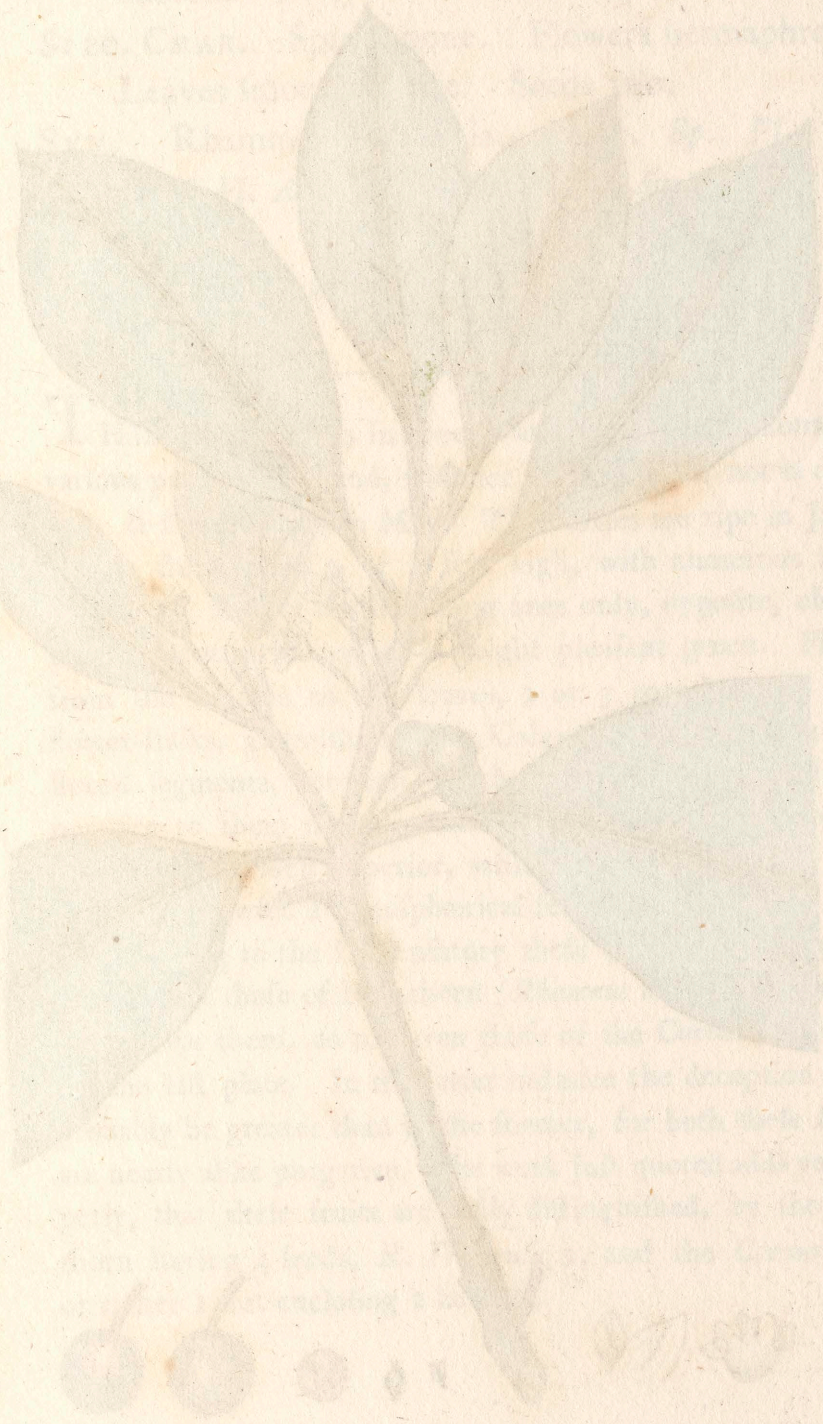
Pentandria Monogynia

Gen. Ch. Cor. salver shaped. Stamina inserted into the tube. Anthera becoming spiral. Style declining. Seed vessel of 2 inflexed valves

Spe. Ch. Stem herbaceous much branched all the way up. Leaves ovate. Cal-teeth awl shaped above half as long as the tube Flowers on stalks.

It appears to be annual flowering in Sept.

Rhamnus 31



May 1st 1795 Published by J. Sowerby London

RHAMNUS Frangula.

Berry-bearing Alder.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* tubular. *Petals* 5, oppoſite to the ſtamina. *Berry* with few ſeeds.

SPEC. CHAR. Spines none. Flowers hermaphrodite. Leaves ſmooth, entire. Seeds two.

SYN. Rhamnus Frangula. *Linn. Sp. Pl.* 280. *Hudſ. Fl. An.* 98. *With. Bot. Arr.* 240. *Relh. Cant.* 96.

Frangula, ſeu Alnus nigra baccifera. *Raii Syn.* 465.

THIS ſhrub occurs in woods and thickets occaſionally in various parts of England, whether in Scotland or not is doubtful. It flowers early in May. The berries are ripe in July.

The ſtem grows 3 or 4 feet high, with numerous forked branches. Leaves on the young ones only, oppoſite, obovate, pointed, entire, veiny, of a bright pleaſant green. Flowers from the boſoms of the leaves, 2 or 3 together, on ſimple flower-ſtalks, greeniſh, ſmall. Calyx cup-ſhaped, with 5 reflexed ſegments, between which ſtand the little petals, and oppoſite to them the very minute ſtamina, with dark purple antheræ. Germen ſuperior, with a very ſhort ſtyle. Berry dark purple, with 2 hemiſphærical ſeeds.

According to the Diſpenſatory theſe berries are ſometimes mixed with thoſe of Buckthorn (*Rhamnus catharticus*), or ſubſtituted for them, as are even thoſe of the Cornel-tree figured on the laſt plate. In the latter inſtance the deception would probably be greater than in the former, for both theſe *Rhamni* are nearly alike purgative. The work juſt quoted adds very properly, that theſe fruits are eaſily diſtinguiſhed, by the Buckthorn having 4 ſeeds, *R. Frangula* 2, and the *Cornus* but 1, or rather 1 nut encloſing 2 kernels.

Nov.r 1.1795 Published by J.t Stockdale London.

EUONYMUS europæus.

Spindle-tree.

PENTANDRIA Monogynia.

GEN. CHAR. *Petals* 5. *Capſule* with 5 angles, 5 cells, and 5 valves, coloured. *Seeds* in a pulpy covering.

SPEC. CHAR. Petals moſtly 4, acute. Leaves on ſhort footſtalks. Branches ſmooth.

SYN. Euonymus europæus. *Linn. Sp. Pl.* 286. *Hudſ. Fl. An.* 98. *With. Bot. Arr.* 241. *Relh. Cant.* 96. *Sibth. Ox.* 82.

E. vulgaris. *Raii. Syn.* 468.

HEDGES and thickets in moſt parts of England produce this ſhrub not unfrequently, though it rarely occurs in mountainous countries. The flowers appear early in May; the fruit does not ripen till the autumn, when it continues to ornament the hedges, even after the leaves are fallen, and is frequently joined with holly and miſeltoe to adorn houſes and churches at Chriſtmas.

This is a ſmall ſhrub, with ſtraight ſpreading branches, which are angular when young, having four ſlightly prominent lines running down them; but theſe are not always viſible; their bark is green and ſmooth. Leaves nearly oppoſite, on ſhort footſtalks, lanceolate, pointed, ſerrated, the firſt pair only being entire. Stipulæ none. Flowers in ſmall, axillary, forked, divaricated panicles, whitiſh and fœtid; the firſt of them that opens having five ſtamina, and as many petals, calyx-teeth, and capſules; but all the reſt have thoſe parts in fours only. The ſtyle is ſhort, ſimple, and acute. Capſules pink-coloured when ripe, burſting at their outer edges, and each cell containing one whitiſh ſeed, enveloped in an orange-coloured pulpy coat. This fruit is reported, even from the days of Theophraſtus, to be violently emetic, purgative, and dangerous. That author aſſerts the leaves to be poiſonous to cattle, eſpecially goats, unleſs they be copiouſly purged. Dr. Withering ſays: Cows, goats, and ſheep eat this plant. The wood, cut in ſummer-time, is tough, and uſed for ſkewers. Linnæus obſerves that it makes the beſt charcoal to draw with.

Euonymus 12

Ribes alpinum — Tasteless mountain Currant

Pentandria Monogynia

Gen Ch — Cal super: 5 cleft bell shaped
bearing the Petals & Stamina. Style down
Berry with many Seeds —

Spec Ch — No Thorns Clusters erect
both in flower & fruit. Bracteæ
longer than the flowers leaves shining
beneath —

A native of rocky mountainous woods
in some parts of the North of England & Scotland
This cannot be confounded with any other
British Ribes. The small leaves so smooth
& shining beneath the constantly upright
Spikes & the insipid Fruit clearly ascertain
it — The Berries so far from having
the sharp acidity of our red Currants are
filled with a Mucilage as tasteless as
Gum Arabic

Rules 33

Ribes petraeum. Rock Currants

Pentandria Monogynia

Gen. Ch. Cal. supr. bell shaped & cleft bearing the petals & Stamina. Style down. Berry with many seeds

Spec Ch. No Thorns. Cluster, in flower erect in fruit pendent — Petals blunt — ish Bractea shorter than the flowers

Gathered in the mountainous country near Eggleston Durham — flowers in May & June & ripens its berries a Month or 6 Weeks later — This is a bushy branchy shrub. with leaves not unlike those of the Arabaeum except that they are rather more downy in general on the under side particularly about the veins — Cal. green-ish often stained with red. & the Petals which vary in shape & length but are generally blunt are brownish or reddish Berries globose bright red acid. - Bractea short roundish very blunt recurved ciliated not so long as even the Stalk of the flower

April 1. 1809. Published by Curtis & Co. London.

VIOLA lutea.

Yellow Mountain Panſy.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-leaved, lengthened out at the baſe. *Pet.* 5, irregular; the lowermoſt ſpurred behind. *Antheræ* ſlightly cohering. *Capſ.* ſuperior, of one cell, with three valves.

SPEC. CHAR. Stem triangular, unbranched. Leaves ovato-oblong, crenate, ciliated. Stipulæ lobed, palmate.

SYN. Viola lutea. *Sm. Fl. Brit.* 248. *Hudſ. ed.* 1. 331. *With.* 263. *Hull.* 192.

V. grandiflora. *Hudſ.* 380. *Lightf.* 508.

V. montana lutea grandiflora noſtras. *Raii Syn.* 249.

THIS Violet, which a ſuperficial botaniſt might paſs by as one of the many varieties of the Common Heart's-eaſe, differs widely from that ſpecies in its place of growth, in being perennial, in having a ſimple ſtem, and in the ſhape of its ſtipulæ, which are deeply five-cleft and palmate, not pinnatifid nor lyrate, though their middle lobe is larger than the reſt.

V. *lutea* is found only in graſſy mountainous paſtures, flowering from May to September. It is plentiful in the north of England, Scotland, and the wildeſt parts of South Wales. The root is ſmall and ſlender. Stem unbranched, weak and proſtrate at the baſe, then erect, riſing to the height of 3 or 4 inches, leafy, triangular, very ſlightly downy, bearing one or two flowers on very long ſtalks from the boſoms of the upper leaves. Leaves alternate, on footſtalks, more or leſs ovate, crenate, finely fringed, accompanied by a pair of large, deeply 5-cleft, fringed ſtipulæ, whoſe outer lobes are deepeſt and narroweſt. Calyx toothed at the baſe. Petals either all yellow, with dark-purple radiating veins, or the 2 uppermoſt are of a blue purple, the reſt yellow with a blue tinge; very often the whole are purple. The antheræ are ſlightly attached to each other. The ſingular form of the ſtyle and ſtigma is expreſſed in our figure greatly magnified; the purple line under the ſtigma is remarkable.

445

Viola lactea. Cream col.d Violet

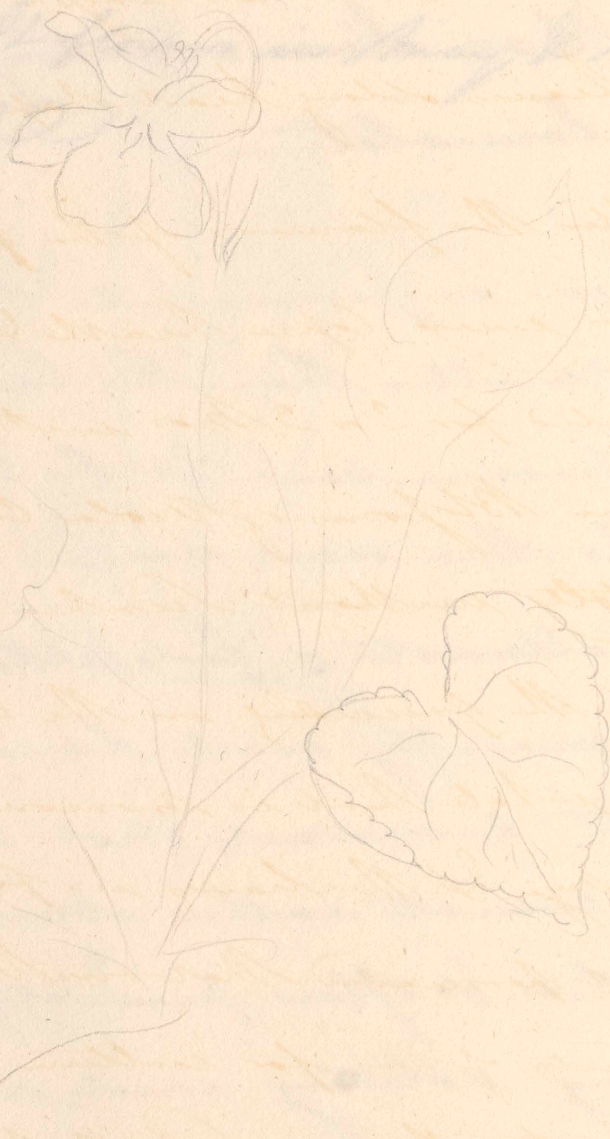
Pentandria Monogynia

Gen. Char. Cal. 5 leav.d Petals 5. irregular
lowermost spurred behind. Caps. sup.r
of 1 cell with 3 Valves

Spec. Char. Stem ascending. Leaves
ovato. lanceolate—

The Root is perennial. Herb in all its parts
much smaller than the Canina quite smooth
Stems procumbent at the base & throwing out
Radicles then erect round branched hairy
Leaves alternate on foot stalks about their own
length generally erect lanceolate or inclining
to ovate decurrent (not cordate) at their base
Veiny crenate rather obtuse. Stipula deep-
ly toothed & often pinnatifid. Flower Stalks
axillary solitary erect rising as high as the
branches each bearing above its middle a pair
of purplish lanceolate Bractia mostly toothed
near their base & at the top one nodding flower
Cal. leaves linear lanceolate. Petals Cream col.

obtuse much narrower than in V. canina
streaked especially the lower one with purp
lines disposed as those in V. C. & the 2 side
Petals as in that are hairy above the base
Spur short & blunt Anthera terminating
a broad dilated membrane not cohering
to each other. It flowers in May & has be
found in Cornwall



1 620

Viola canina Dogs Violet

Pentandria Monogynia

Gen. Ch. Cal. 5 leaved. &c

Spe. Ch. Stem at length ascending Stemless leaves oblong heart shaped. Cal. acute

After the flowers of the fragrant Violet are over every Copse heath & shady dell is decorated for 2 or 3 Mos with the paler & less sweet some Blossoms of Viola Canina which are ~~totally~~ without Scent This Species varies like the preceding in the Colr of its blossoms the whole Sort is moreover extremely variable in Size & the leaves in form — We are almost persuaded that our V. lactea is only a variety of this for culture being Sown very close together — Root perennial somewhat woody the first flowers are radical. but several branched angular leafy Stems Spring forth. & continue growing & bearing numerous flowers for several Mths leaves heart shaped or oblong crenate smooth Stipulaceous Stalks smooth somewhat dilated at the top. Stipules fringed. flower stalks axillary solitary

erect square bearing 2 awl shaped Bracteæ in
the upper part & 1 nodding blue flower Anthers
scarcely cohering.- Cal leaves acute. Stigma
gibbous - Caps rather more oblong than in the
sweet Violet - Seeds roundish

Viola palustris — Marsh Violet

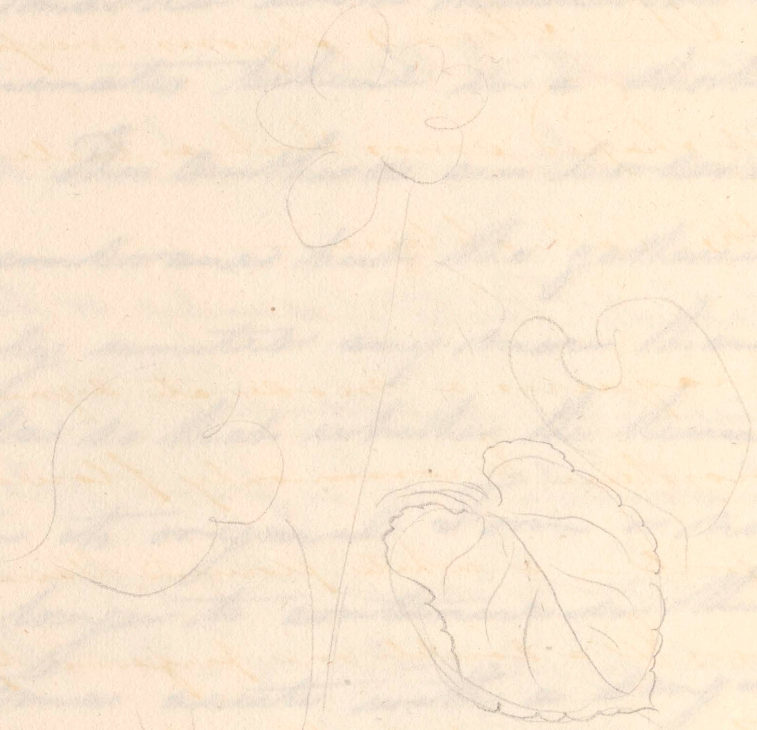
Pentandria Monogynia

Gen Char. Calyx 5 leaved. Petals 5 irregular
the lowermost spurred behind — Caps. sup.
of 1 cell with 3 Valves

Spec. Char. Stem none. Leaves Kidney Shaped

On the Moist Parts of sandy or turfy heaths
more frequent in Scotland & the North of England
than in the South — yet is found plentifully accor-
ding to Mr Curtis near Croydon & our Specimen
was gathered in Norfolk by Mr Dawson Turner
Root perennial creeping somewhat fleshy with
many fibres. Stem none. Leaves on Smooth semi
cylindrical footstalks. spreading Kidney Shaped mos
deep pointed crenate veiny Smooth of a delicate
texture often purple beneath — Stipulæ radical o.
late acute Smooth scarcely perceptably serrated
Flower Stalks longer than the leaves erect square
Smooth with a pair of lanceolate erect Bracteæ
about the middle. Flowers appearing in May
solitary drooping inodorous paler & smaller than in

the more common Species. Cal. leaves rather e
tical slightly membranous at the Edge – The 2
per Petals are scarcely streaked at all the 2 -
ral ones have one dark longitudinal line b
bearded with white near the Base — The lower
is beautifully marked with numerous branche
streaks & terminates behind in a short blunt
bearing Spur The anthers are bordered with
orange col.d membrane but tho gathered together
they are scarcely united any more than in other
Species of Viola so that whether the Linnean Sys
tem remains in its original Form or not this Ge
nus ought no longer to continue in the Class Ge
nesia – Stigma acute with a singular Pro
tuberance above it



Viola odorata — Sweet Violet

Pentandria Monogynia

Genlet — as before —

Spec Ch — Stem 0 Sayons creeping leaves heart shaped smooth rich as well as the foot stalks Cal. obtuse —

It requires a moderate degree of shade & moisture & commonly flowers in March or April — a white flowered Variety sometimes occurs & a double one prefered by florists & justly so on acct of its richer scent —

Viola 34

Viola hirta — Hairy Violet

Pentandria Monogynia

Genl Ch —

Spec Ch Stem o. leaves heart shaped rough as well as Rhiz Stalks with hairs Cal. obtuse —

This subsist differs from the common ones only in having rather paler & scarcely flowers is notwithstanding a most distinct Species from Mart by far less frequent It is only found on a Chalk or limestone soil flowering in April or May Root perennial & creeping Body Stem o. Leaves simple short footstalked but not taking root — leaves on long upright hairy footstalks heart shaped serrated veiny & dotted on both sides with short dense hoary hairs — Stipules in pairs radical lanceolate toothed. Flowers stalks taller than the leaves smooth bea-

ring below their middle a pair of lan-
ceolate smooth Bracteæ — Cal smooth
lateral Petals marked with a hairy line
as in V. odorata. Stamina flat — Anthers
terminating in an ovate Cald. Membrane
approaching each other but not united. Caps.
ovate roundish hairy containing several roun
Seeds —

Impatiens 35

Impatiens noli me tangere. Yellow Balsam

Pentandria Monogynia

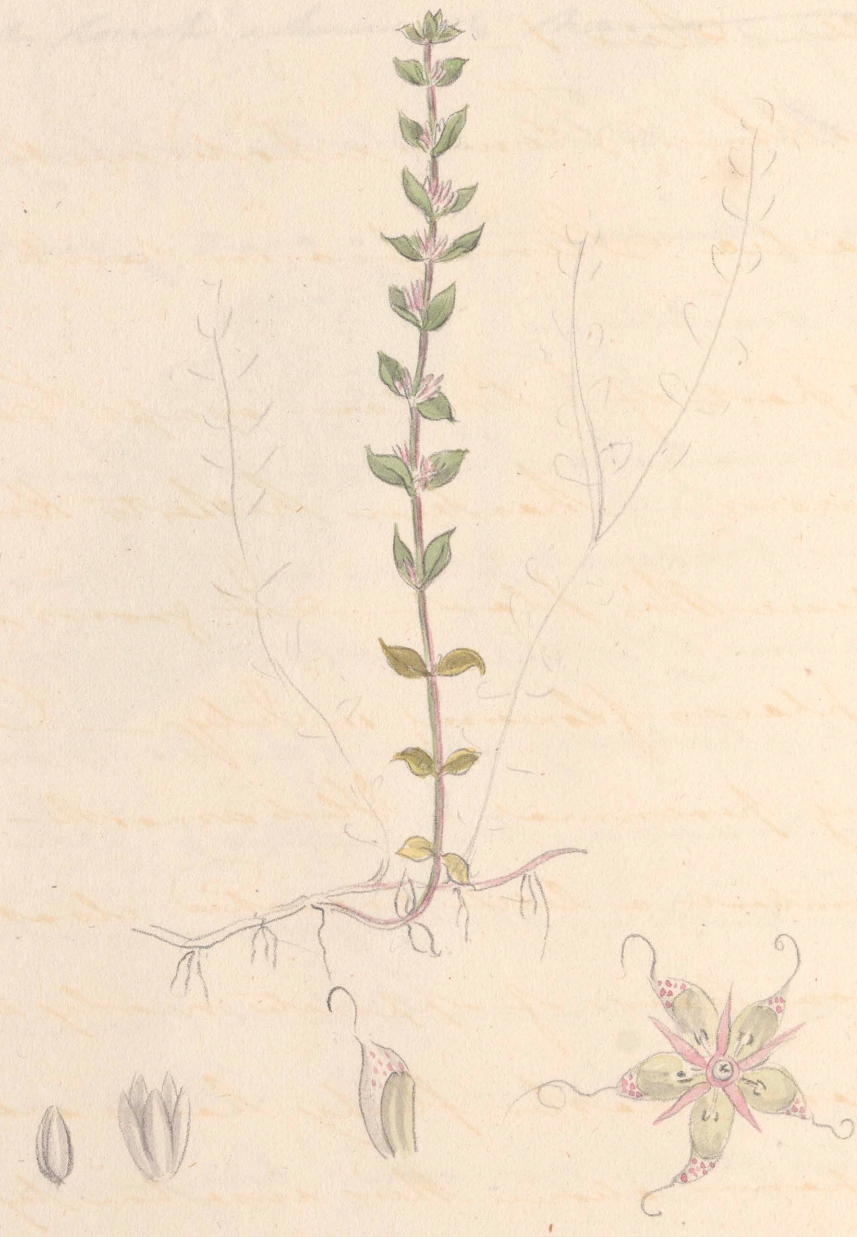
Gen Ch— Cor of 5 petals irregular with a hood shaped Nectary — Anthers elightly connected — Caps super of 5 elastic Valves Cal of 2 leaves —

Spec Ch— Flower stalks solitary bearing many flowers — Leaves ovate. joints of the Stem swelling

Ray mentions this elegant Plant as a Native of several Places in Westmoreland Lancashire Yorkshire & Wales — We have seen it plentifully about the North End of Windermere in Watery Spots — It will succeed well in shady Gardens scattering its Seeds spontaneously with more ease than if sown by hand — Root annual branched fleshy spreading horizontally Stem solitary erect about 2 feet high branched hairy round succulent very smooth & polished Leaves alternate on footstalks ovate obtuse serrated smooth veiny flower stalks axillary & branched bearing 4 or 5 large handsome yellow

lous flowers. yellow spotted internally with red
consisting of a horn shaped Nectary Supper
Petal & 2 large lateral lobed ones accompanied
at the base with 2 small entire Petals united
to them — Anthers united at their bases rather
than their summits. The elastic Valves of the Cap-
sule when ripe curl up & fly asunder at the
slightest touch when it is ripe

Illecebrum 36



Illecebrum Verticillatum — Whorled Knotgrass

Pentandria Monogynia

Gen. Ch. Cal. of 5 leaves cartilagenous inf. — Cor. 0. Caps. of 5 Valves with 1 cell — Sem. 1 —

Spe. Ch. Stems procumbent —

Boadea Stems procumbent —

No part of Britain except Cornwall & Devonshire has been hitherto known to produce this plant — It grows in moist boggy places flowering in July — Root creeping perennial — Plant smooth — Stems procumbent a little branched cloathed with numerous pair of opposite nearly sessile ovate entire rather fleshy leaves which are accompanied above their insertion by membranous laceated Stipulæ. Tufts of flowers forming a small Whorl grow out of almost every pair of leaves — The Cal. consists of 5 white oblong leaves thick & fleshy hollowed out on the inside Each tipped with a curved

bristle - The Stamina are shorter than the
Cal & stand on a kind of ring with 5
reddish ill shaped Rays ranged alternately
with them on the same basis which look
like Petals - but their insertion & the ana
logy of other Plants of this Natural Order
rather indicate them to be of the Nature of
barren filaments - We know not whether
they are found in every Species of Illecebrum
The Germ is ovate Style very short Stigma
red with 5 small Protuberances - Caps of 1 cell
but formed of 5 Valves - The most certain
mark of the Genus - Seed solitary ellip
tical tapering round not compressed.

J. Sowerby delint. April 1. 1791.

GLAUX maritima.

Black Salt-wort.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* one-leaved, campanulate. *Cor.* none. *Capſule* ſuperior, one-celled, five-valved, and five-ſeeded.

SPEC. CHAR. Only one ſpecies known.

SYN. Glaux maritima. *Linn. Sp. Pl.* 301. *Hudſ. Fl. An.* 101. *With. Bot. Arr.* 246. *Raii Syn.* 285.

NOTHING can be more common than this pretty little plant in ſalt marſhes. It enlivens large tracts of the dreary and wretched ſituations where it is found, with its purpliſh fleſh-coloured or whitiſh flowers, which are produced in great abundance in the ſummer, ſtanding ſolitary, and with ſcarcely any foot-ſtalks, in the boſoms of the leaves.

The root is perennial and creeping.

The whole plant is ſucculent and ſalt to the taſte. Dr. Withering remarks that cows eat it.

Glaux 37

Publish'd by Jas Sowerby May 1st. 179:

THESIUM linophyllum.

Baſtard Toad-flax.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* none. *Cal.* of one leaf, bearing the ſtamina. *Seed* one.

SPEC. CHAR. Spike branched. Bracteæ ternate. Leaves linear-lanceolate. Tube of the calyx very ſhort.

SYN. Theſium Linophyllum. *Linn. Sp. Pl.* 301. *Hudſ. Fl. An.* 101. *With. Bot. Arr.* 247. *Relh. Cant.* 99. *tab. Sibth. Oxon.* 414.

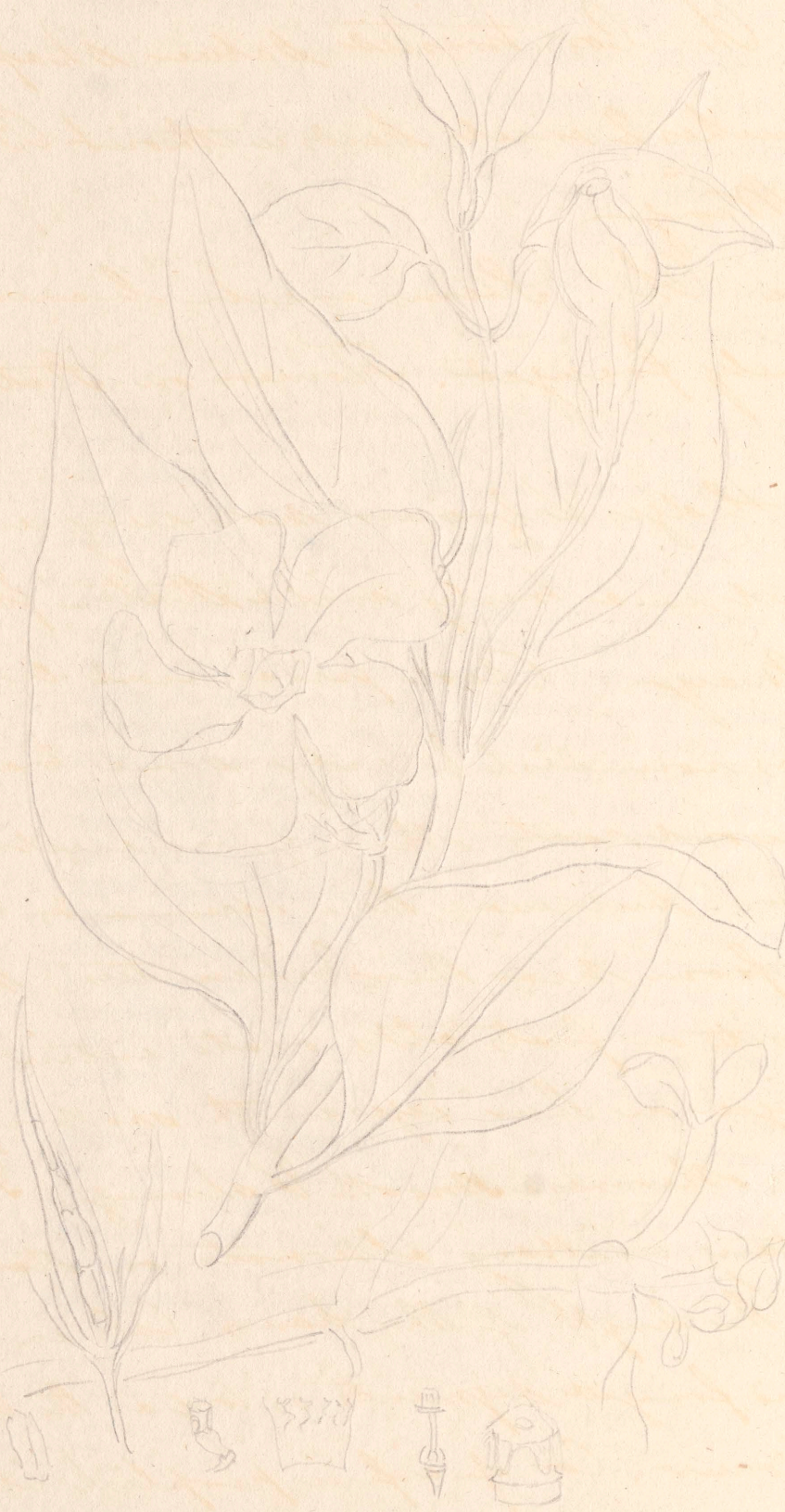
Linaria adulterina. *Raii Syn.* 202.

WE have received this plant from Sir Thomas Cullum, and the Rev. Mr. Hemſted, gathered near Bury and Newmarket, and alſo from the Lime-kiln hill, near Shouldham in Norfolk, where (for the firſt time, to our knowledge, in that county) it was found by the Rev. Mr. Forby. It grows on a chalk ſoil, flowering in July.

Root woody, branched, crooked, whitiſh, perennial. Stems ſeveral, reclining, 5 or 6 inches high, but little branched, angular and ſtriated, clothed with numerous alternate linear leaves, all pointing one way, ſomewhat glaucous and ſucculent, entire. The whole herb is deſtitute of pubeſcence, but the edges of the leaves, bracteæ, and angles of the ſtem appear rough under a microſcope. Flowers in ſpikes (moſtly branched, and ſometimes ſo compound as to form a panicle), ſolitary, on alternate flower-ſtalks, with 3 bracteæ cloſe to each flower ſhaped like the leaves, but in the lower part of the ſpike one is much larger than the other two. Calyx funnel-ſhaped, the tube very ſhort and open, margin ſpreading, 5-lobed; lobes triangular, with a tooth on each ſide near the baſe, very white above, and at the margin beneath. Stamina 5, oppoſite to the calyx-lobes. Style erect, equal to the ſtamina. Stigma with 2 knobs. Seed oval, 5-angled, ſtriated, hard, inveſted with the permanent calyx. The herb is ſcarcely bitter, a little ſaltiſh.

This without doubt is T. *Linophyllum*, but when cultivated, as Linnæus had it, the whole herb becomes luxuriant, the ſpike panicled and leafy, according to his definition. T. *alpinum* differs from this in having a long tubular calyx; otherwiſe they are much alike. The intermediate kind, mentioned in Withering, we believe to be the proper wild appearance of *Linophyllum*.

Thesium 38



Vinca major. Greater Periwinkle

Pentandria Monogynia

Gen. Ch. Cor. twisted Salver shaped
Coutes 2 erect Seeds without Beard
or Wing

Spec. Ch. Stems erect leaves ovate
finely fringed. Flowers on Stalks

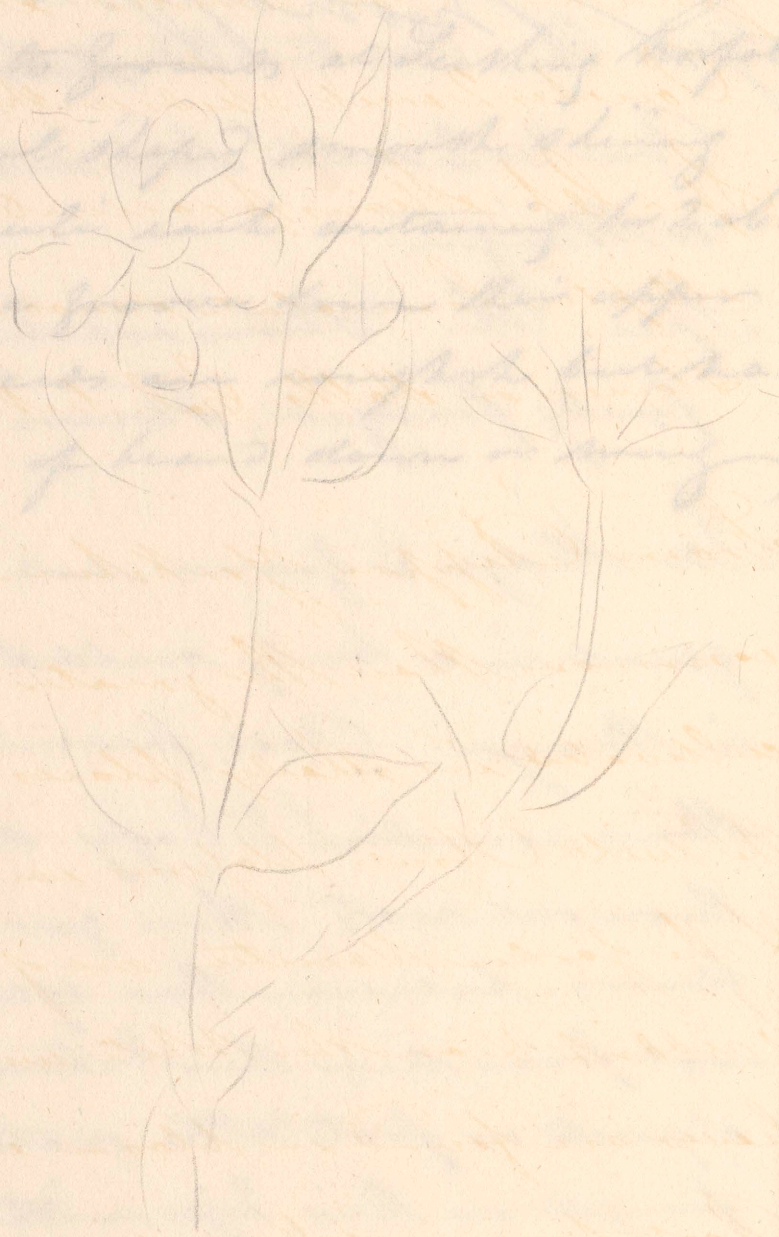
In Hedges & Groves not very unfre-
quent in a truly wild State - flowers
in May. Root perennial creeping
Stems roundish & leafy some trail &
throw out roots others grow erect & bear
flowers - but even these afterwards take
root from near their Extremities. Leaves
opposite on footstalks ovate entire finely
fringed on their Edges with short rigid
hairs. otherwise Smooth & shining. Flowers
solitary axillary alternate on stalks about
half the length of the leaves. Cal. in 5 awl
shaped fringed Segments as long as the tube of
the flower. Cor of a fine purplish blue sal-
ver shaped. twisted. its tube inflated &
5 sided in the upper part. Stamina inser-
ted about its middle bowed ciliated & com-
pressed. Anthers cordated. Germen double

with 2 glands at its base. Style simple
Stigma shaped like a Pulley orange coloured
its top 5 lobed & downy. The Fruit which
few Botanists have seen is produced every
Year in Mr Kitts Grounds at Lenking Norfolk
& consists of 2 oval shaped smooth shining
pouches or folliculi each containing 1 or 2 ob-
long seeds with a groove down their upper
side. These seeds are roughish but na-
ked or destitute of beard down or wing

Verse 39

Parlandori

Monogyna



Vinca minor — Lesser Periwinkle

Pentandria Monogynia

Gen. Ch. — Cor. twisted Salver shaped
Pouches 2 erect. Seeds without beard or Wing
Spec. Ch. Stems procumbent — Leaves
elliptic lanceolate smooth at the edge
Flowers on stalks. Cal. teeth lanceolate

From Ripon Yorkshire — for the
common Vinca the greater V. — generally
cultivated in shady places under Trees
the wild Plant blossoms earlier than V. major
& the garden Varieties one purple is dble
& reddish & another White with variegated
leaves are found in bloom even in March
Root perennial & creeping — Whole Plant
smooth & shining — Stems round slender
hairy erect when in flower afterwards pros
trate elongated taking root at the joints
Leaves are destitute of the fringed Edge observa
ble in V. major

5a 28ne

J.ª Sowerby del.t Oct.r 1.ª 1804

HERNIARIA glabra.

Smooth Rupture-Wort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 ſegments. *Cor.* none. Five barren *ſtamina*. *Capſule* with one *ſeed*.

SPEC. CHAR. Herbaceous and ſmooth.

SYN. Herniaria glabra. *Linn. Sp. Pl.* 317. *Hudſ. Fl. An.* 108. *With. Bot. Arr.* 250.

Herniaria. *Raii Syn.* 160.

THIS was found in Ray's time in gravelly ſoil about the Lizard point, Cornwall, where it ſtill grows abundantly. The Rev. Mr. Hemſted gathered this wild ſpecimen near Newmarket.

Root taper, annual. Stems ſeveral, various in length, ſpreading flat on the ground in the form of a ſtar, alternately branched, round, ſometimes minutely pubeſcent. Leaves oppoſite about the lower part of the ſtem, one often ſmaller than the other, elliptical, entire, ſmooth. Stipulæ membranous. Flowers in leafy cluſtered racemi, oppoſite to the ſolitary leaves, ſmall, green, ſhort-lived, very numerous. The calyx is cloſed after flowering, and embraces the ripening capſule. It flowers about July and Auguſt.

Whence this plant obtained its abſurd name, and credit for curing ruptures, is hardly worth enquiring.

The variety β of Mr. Hudſon is manifeſtly (from Plukenet's figure copied by Petiver) nothing but Glaux maritima. What H. lenticulata of Linnæus may be, it is not our purpoſe now to determine, but there is much reaſon to ſuppoſe it Creſſa cretica.

Herniaria 1

1034

Chenopodium olidum — Stinking Goosefoot

Pentandria Digynia

Gen Ch —

Spec Ch — Leaves ovate somewhat rhomboid entire. Flowers in dense clustered spikes. —

Frequently occurs about London — in general it is most plentiful about the Sea coast flowering in Augt —

The whole plant is of a dull glaucous or greyish green — invested with a greasy mealiness which when touched exhales a most odious & lasting smell — like that of stale salt fish — which Linnæus tells us is very attractive to Dogs —

CHENOPODIUM urbicum.

Upright Gooſefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, inveſted with the cloſed five-ſided calyx.

SPEC. CHAR. Leaves triangular, toothed. Cluſters denſe, very ſtraight, long, approaching the ſtem, and almoſt leafleſs.

SYN. Chenopodium urbicum. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 273. *Hudſ.* 104. *With.* 270. *Hull.* 56. *Sibth.* 87. *Abbot.* 54.

C. erectum, foliis triangularibus dentatis, ſpicis e foliorum alis plurimis longis erectis tenuibus. *Dill. in Raii Syn.* 155.

THIS is one of the moſt difficult to aſcertain of all our Britiſh ſpecies of *Chenopodium*, and I confeſs myſelf entirely obliged to Mr. Curtis in his *Fl. Lond. faſc.* 6. *t.* 21, for a deciſive mark to diſtinguiſh it from the *rubrum*, which conſiſts in the ripe ſeeds of the latter being no larger than grains of writing ſand, whereas thoſe of the plant now before us are at leaſt five times that ſize, or about as big as Rape ſeed. In the red or green colour of the ſtem and flowers both plants vary. C. *urbicum* however has the leaves in general more truly triangular, leſs lengthened out at the baſe, and not ſo deeply ſinuated as the other; cluſters more ſtraight and erect, at length cloſe-preſſed to the ſtem, and almoſt deſtitute of the little leaves ſo copiouſly interſperſed among the flowers of C. *rubrum*. The flowers in both are occaſionally polygamous; but the calyx being univerſally regular, five-cleft, and not much enlarged after flowering, clearly ſeparates *Chenopodium* from *Atriplex*.

C. *urbicum* is common in St. George's fields, flowering in Auguſt and September. It is annual, and thrives on dunghills and waſte places about towns or villages. We have ſpecimens from Norfolk, Oxfordſhire, and Bedfordſhire.

Chenopodium Bonus Henricus — Perennial

Goosefoot

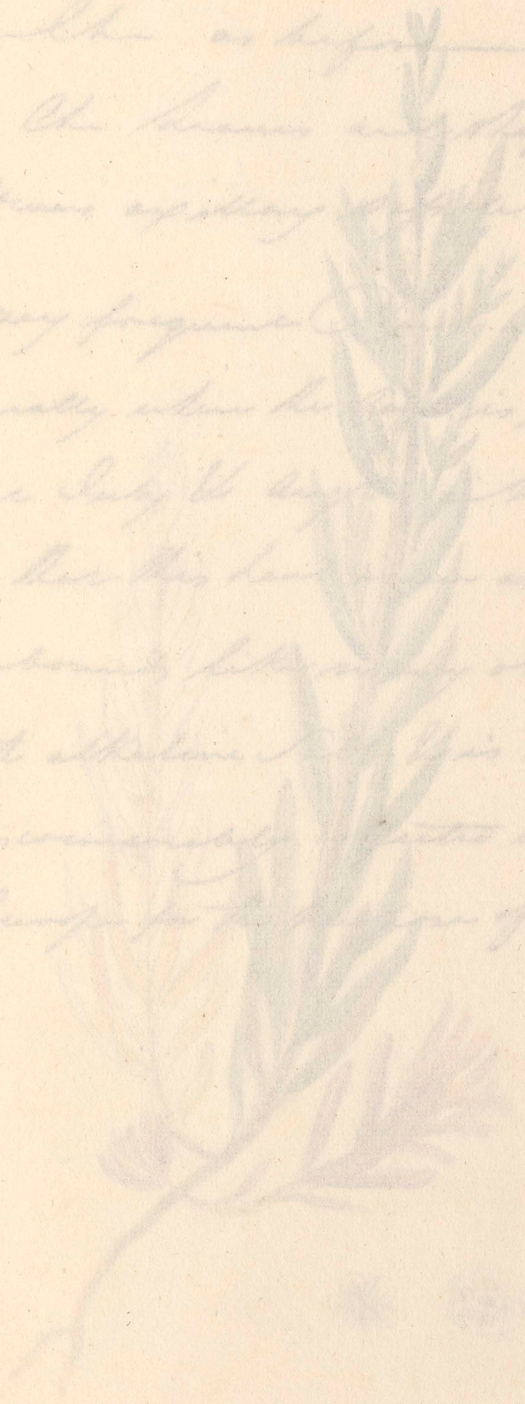
Pentandria Digynia

Gen Ch — Cal 5 clept inf. Cor 0. Seed 1 lenticular invested with the closed 5-sided Calyx.

Spec Ch — Leaves triangular arrow shaped entire. Spikes compound leafless —

Perennial flowering from May to the End of the Summer by which it is distinguished from other B. plants of this Genus which are all annuals flowering for the most part late in the Autumn. it frequently occurs in waste Grounds about Villages farm Yards & Cottages. — The young Herb boild is a good Substitute for Spinach & is in some places cultivated for the Table

Chenopodium 2



Chenopodium Maritimum Sea Goosefoot

Pentandria Digynia

Gen Ch as before

Spe Ch Leaves awl shaped semi cylindrical flowers axillary sessile

A very frequent Plant on the Sea shore more especially where the soil is muddy flowering about July & Augt. Mr Woody has observed that this Plant is an excellent "Boiled Salad"! it abounds like many other Maritime plants with Alkaline Salt & is one of those which are indiscriminately collected in the Warmer parts of Europe for the purpose of making Glass.

Nov.1.1795 Published by J.t Sowerby London.

BETA maritima.

Sea Beet.

PENTANDRIA Digynia.

GEN. CHAR. *Calyx* 5-leaved. *Cor.* none. *Seed* kidney-ſhaped, within the ſubſtance of the baſe of the calyx.

SPEC. CHAR. Stems procumbent. Flowers in pairs. Calyx entire.

SYN. Beta maritima. *Linn. Sp. Pl.* 322. *Hudſ. Fl. An.* 108. *With. Bot. Arr.* 257.

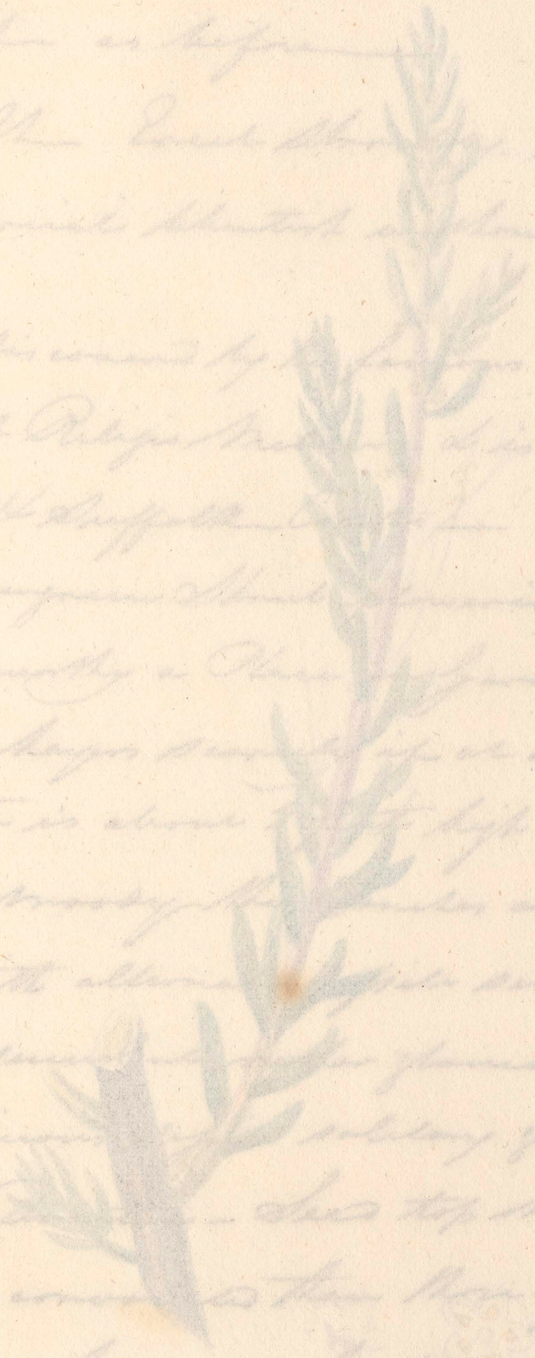
B. ſylveſtris maritima. *Raii Syn.* 157.

A NATIVE of the ſea ſhore in ſeveral parts of England, more eſpecially in muddy places. Dr. Smith found it by the river ſide juſt below Lynn, with *Atriplex pedunculata* and other rarities. The ſpecimen here delineated was gathered near Scarborough by Mr. William Travis, and we are the more obliged to this gentleman for his communication, as there is no figure of *B. maritima* extant.

Root, according to Ray, perennial, by which he ſays it differs from the garden Beets; its ſubſtance thick and fleſhy. Stems ſeveral, proſtrate, a circumſtance which the form of our page would not allow of being duly expreſſed in the plate. Leaves ſucculent, the edge waved but entire, decurrent into the foot-ſtalk; the radical ones numerous and larger; thoſe on the ſtem all turned upwards from the ground, and bearing in their *axillæ* cluſters of ſmall leaves and flowers. The ſtem terminates in a more or leſs compound leafy ſpike, bearing the flowers either in pairs or ſolitary, never many together, by which circumſtance, added to its proſtrate ſtem and conſequently vertical ſtem-leaves, and the keel of the calyx-leaves being entire, not toothed as in B. *vulgaris*, this ſpecies is with certainty diſtinguiſhed, according to Linnæus, who cultivated it in his garden, and remarks that it flowered the firſt year. He thought it an annual. With us it appears to be perennial, flowering in Auguſt and September. The ſtigmas are very frequently three in number.

Beta 3

Salsola 4



Salsola fruticosa – Shrubby Saltwort

Pentandria Digynia

Gen Ch as before

Spec Ch Erect shrubby. Leaves semi-cylindrical blunttish without Spines

First discovered by the famous Dr. R. Brown Med author of Religio Medici – it is now found on the Norfolk & Suffolk Coasts — it forms an elegant evergreen shrub flowering in July & deserves a Place in Gardens – it is propagated by layers scarcely if at all by cuttings The Stem is about 2 feet high or more erect branched woody The branches also erect & thickly clothed with alternate subsessile semicylindrical blunttish succulent rather glaucous leaves. flowers inconspicuous sessile calicine green with 3 small Bracteæ – Seed top shaped its style does by convoluted Tail Root of the last Species The leaves have an herbaceous flavour with a slight degree of Salt & some astringency

Salsola Kali — Prickly Saltwort

Pentandria Digynia

Gen. ch. Cal. 5 cleft its base capsular
Cor. 0. Seed 1 with spiral cotyledons
Spec. ch. Herbaceous procumbent. leaves
awl shaped spinous rough flowers axillary
Cal. margined

Very abundant on all sandy Sea Shores
flowering copiously in July. Root annual
This contributes more generally to the manufacture of soda for making Glass than Chenopodium Maritimum but is not reckoned equal to some other Species of S.

Published by J.ª Sowerby March 1.ª 1793

GENTIANA Amarella.

Autumnal Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capſule* ſuperior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla five cleft, ſalver-ſhaped, bearded in the orifice. Segments of the calyx equal.

SYN. Gentiana Amarella. *Linn. Sp. Pl.* 334. *Hudſ. Fl. An.* 103. *With. Bot. Arr.* 262. *Relh. Cant.* 100. *Sibth. Oxon.* 85.

Gentianella fugax autumnalis elatior, Centaurii minoris folio. *Raii Syn.* 275 ?

β G. fugax verna ſeu præcox. *Raii Syn.* 275.

FOUND in graſſy paſtures above lime-ſtone rocks, varying in ſize according to the degree of moiſture, and flowering in Auguſt and September—The variety β flowers from April to June.

Root annual, twiſted, yelloviſh. Stem ſquare, erect, bearing ſeveral pair of ſeſſile, ovate, 3-nerved, dark-green leaves, and clothed from top to bottom with flowers, on ſhort, axillary, forked ſide branches, one being terminal. Calyx pale, with green ribs, and divided half way down into 5 lanceolate, nearly equal, ſegments. Tube of the corolla twice as long as the calyx; limb in 5 ſegments, rarely but 3 or 4, horizontal when the ſun ſhines, the orifice crowned with a purple upright fringe, which conceals the ſtamina. Germen oblong; ſtyles very ſhort; ſtigmas divaricated. The whole herb is intenſely bitter, and poſſeſſes the ſtomachic virtues of its congeners.

It is extremely difficult to aſcertain the 3 Gentians mentioned in Ray's Synopſis, 275. Neither he, nor his editor Dillenius, ſeems to have been aware of the real difference between G. Amarella and campeſtris, and their Synonyms are almoſt all quoted with heſitation. We can therefore only gueſs, from the ſlender materials before us, what they intended.—As to the *Vernal dwarf Gentian*, we quote it as a variety, having been favoured with a ſpecimen gathered by the late accurate Sir John Cullum, on the heath between Grantham and Ancaſter, in flower June 6, 1774, which he therefore reaſonably preſumed was the above plant of Ray. But it differs in no reſpect from G. Amarella, except in time of flowering. As we are on the ground of conjecture, may not ſuch early-flowering ſpecimens be ſome that happened to ſpring up in the preceding autumn, and ſtood the winter?

Published by Jas Sowerby del.t March 1.t 1793

GENTIANA campeſtris.

Field Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capſule* ſuperior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla four-cleft, bearded in the orifice. Two outer ſegments of the calyx very large.

SYN. Gentiana campeſtris. *Linn. Sp. Pl.* 334. *Hudſ. Fl. An.* 103. *With. Bot. Arr.* 262. *Sibth. Oxon.* 86. G. pratenſis flore lanuginoſo. *Raii Syn.* 275 ?

WE received this from near Bury, along with the preceding. It grows in paſtures, more particularly towards the ſea; nor is it ſo much confined to a lime-ſtone ſoil as that ſpecies. It is annual, flowering in September and October.

This in habit is much like the laſt, though rather paler in colour altogether, and never ſo tall: the ſtem being leſs drawn up, the flowers fewer, and on longer flower-ſtalks, they appear more corymboſe. But the eſſential and all-ſufficient mark of diſtinction is in the calyx being deeply divided into 4 unequal ſegments, 2 of which are external, oppoſite, oval, very large, completely enfolding and concealing the 2 others, which are lanceolate and not a fifth part ſo broad. This character was noted by Linnæus in *Flo. Lapponica*, and is adopted by Haller. Surely it ought to have been mentioned in *Sp. Pl.* But it is ſtill more wonderful that Linnæus ſhould have doubted whether this were a ſufficient diſtinction.

When we preſume ours to be the above plant of Ray, we by no means believe it to be alſo that of Bauhin, which is moſt probably (as all authors ſuppoſe) G. Amarella.

J. Sowerby del. June 1. 1794.

GENTIANA Pneumonanthe.

Marſh Gentian, or *Calathian Violet.*

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capſule* ſuperior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla bell-ſhaped, five-cleft. Flowers on foot-ſtalks. Leaves linear.

SYN. Gentiana Pneumonanthe. *Linn. Sp. Pl.* 330. *Hudſ. Fl. An.* 102. *With. Bot. Arr.* 261.
G. paluſtris anguſtifolia. *Raii Syn.* 274.

WE are indebted for the wild ſpecimen here figured of this rare and beautiful Gentian to the Rev. Mr. Charles Sutton, B. D. of Norwich, who gathered it on Stratton Strawleſs Heath, a few miles from that city, the very place in which it was found by the amiable Stillingfleet many years ago. It uſually prefers a wet turfy ſoil, and flowers in Auguſt.

Mr. Sutton remarks that the leaf varies in figure from *linear* to almoſt *ſpatulate;* that the antheræ are united till the capſule ſwells, and forcibly ſeparates them; and that after a wet ſpring the plant is found much more luxuriant, bearing five, ſix, or ſeven flowers, inſtead of one or two.

Such a gigantic ſpecimen appears to have occaſioned Linnæus to define it *corollis oppoſitis*, having *oppoſite corollas*, or rather *flowers;* but we have omitted this in our ſpecific character, as tending to miſlead. The connection of the antheræ is full as remarkable as that of Lobelia, and more ſo than in Viola; both which, on account of ſuch an adheſion, are placed in the claſs Syngeneſia: but the inconſtancy of this character, except in *compound flowers*, ſeems to authoriſe the abolition of the order Syngeneſia Monogamia altogether.

Gentiana Verna. Spring Gentian

Pentandria Digynia

Gen. Ch. Cor. of 1 Petal. Caps. superior 1 celled 2 valved with 2 longitudinal receptacles

Spec. Ch. Cor. 5 cleft. Salver shaped. Crenate Segments toothed at their base. Leaves clustered ovate

This very elegant Plant was gathered in April in Teesdale Count Durham —

The Root is perennial Thread shaped & creeping Stem about an inch high Simple single flowered Prickly clothed with leaves which are more especially clustered in the lower part & are of an Ovate form entire generally pointed. Flower solitary terminal each large. Cal. with 5 waved carinated Angles & 5 equal sharp Teeth. Cor with a plaited cylindrical tube twice as long as the Calyx & a flat limb in 5 equal Ovate

crenated lobes of a most vivid blue with a tooth on each side at their base — Stamina shorter than the tube Germen cylindrical. Style really simple with a flat feathery 2 lobed Stigma — The whole Leaf is smooth but better than most Gentians — Sometimes the flowers are of a paler blue

Gentiana 5

Gentiana Nivalis Linn. Alpine G

Pentandria Digynia

Gen. Ch.

Spec. Ch. Cor. 5 cleft funnel shaped angles of the Cal. erect. Stem many flowered

Truly does this lovely little Plant deserve the name Nivalis for on the Alps it is only to be found above the limits of perpetual frost & in our own Country it has been observed nowhere but near the Summits of 1 or 2 of the highest Mountains in Scotland which are about 3 Months in the Year without Snow. It is annual flowers in July or Augt & quickly ripens its Seed

ERYNGIUM campeſtre.

Field Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Flowers* in little denſe heads. *Receptacle* ſcaly.

SPEC. CHAR. Leaves embracing the ſtem, divided in a pinnated manner.

SYN. Eryngium campeſtre. *Linn. Sp. Pl.* 337. *Hudſ. Fl. An.* 110. *With. Bot. Arr.* 264.

E. vulgare. *Raii Syn.* 222.

ALTHOUGH very common on the continent, and therefore denominated *vulgare* by Bauhin, Camerarius, &c. this ſpecies is ſo very rare in England, that we cannot follow thoſe Britiſh authors, however reſpectable, who name it *common Eryngo*. We are aſſured by the Rev. Mr. Wood, of Leeds, that it ſtill grows by the Watling-ſtreet road, oppoſite Brook-hall, near Daventry, as mentioned by Ray. Our figure was drawn from a garden ſpecimen compared with a wild one, with which it perfectly agreed.

The root is perennial and ſtrong. Stem a foot high, much branched. The whole plant very rigid, and of a pale green. It flowers in July and Auguſt. The petals are white or purpliſh.

Eryngium 6

April 1. 1800. Published by J. Sowerby, London.

ERYNGIUM maritimum.

Sea Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* of many leaves. *Flowers* in little denſe heads. *Receptacle* conical, ſcaly. *Seeds* briſtly.

SPEC. CHAR. Radical leaves roundiſh, plaited, ſpinous. Heads of flowers on ſtalks. Scales three-cleft.

SYN. Eryngium maritimum. *Linn. Sp. Pl.* 337. *Sm. Fl. Brit.* 288. *Hudſ.* 109. *With.* 283. *Hull.* 58. *Woodv. Med. Bot. t.* 102. *Dickſ. H. Sicc. faſc.* 10. 3. E. marinum. *Raii Syn.* 222.

COMMON in the looſe ſand of the ſea ſhore, flowering in July and Auguſt.

Root long, creeping, perennial. Herb very rigid, all over glaucous, which renders it ſtrikingly conſpicuous, and every part is ſmooth. Stem round, furrowed, branched and buſhy, about a foot high. Leaves of a roundiſh kidney-ſhape, plaited, lobed, ribbed, with ſpinous teeth; the radical ones are more rounded, and ſtand on foot-ſtalks. Flowers in denſe blue terminal heads, each ſurrounded by an involucrum like the leaves. Scales of the receptacle three-cleft, whereas thoſe of E. *campeſtre*, *t.* 57, are ſimple. Petals hooked.

"Eryngo roots and Bohea tea" have been celebrated by our moſt witty poet Prior for their reſtorative or ſtimulating qualities. Under this idea, perhaps not ill-founded with reſpect to the Eryngo, theſe roots have been much uſed in domeſtic medicine, and are ſometimes ſold candied; a very elegant mode of preparing them. A ſhop at Colcheſter, Mr. Great's, has been famous for them for ſeveral generations.

Hydrocotyle ?

(71)

HYDROCOTYLE vulgaris.

Marsh Pennywort. Withering.

Johnson. Published by J.S. Sowerby, London.

HYDROCOTYLE vulgaris.

Marſh Penny-wort. White-rot.

PENTANDRIA Digynia.

GEN. CHAR. *Umbel* ſimple. *Involucrum* of about 4 leaves. *Petals* undivided. *Fruit* circular, compreſſed.

SPEC. CHAR. Leaves peltate. Umbels of five flowers.

SYN. Hydrocotyle vulgaris. *Linn. Sp. Pl.* 338. *Sm. Fl. Brit.* 290. *Hudſ.* 110. *With.* 284. *Hull.* 58. *Relh.* 107. *Sibth.* 91. *Abbot.* 57. *Curt. Lond. faſc.* 6. *t.* 19. *Raii Syn.* 222.

ON boggy commons, moiſt heaths, and all watery places in general that are not ſtagnant, the *Hydrocotyle vulgaris* abounds, and may be found in flower from May to the end of June. The herb is perennial, and the proſtrate ſtems ſpread very far, taking root at every joint, and alſo producing from the ſame point ſeveral upright, ſimple, ſmooth or hairy, footſtalks, each of which ſupports a horizontal, peltate, roundiſh, crenate, ſmooth and ſhining leaf, as well as one or more flower-ſtalks not ſo high as the leaves, having a pair of bracteæ at their baſe, and bearing an umbel of 5 flowers, which is often proliferous, producing another ſuch umbel from its centre; but the partial ſtalks are never branched or compounded like thoſe of moſt umbelliferous plants; indeed they are ſo ſhort as to be ſcarcely diſcernible. Involucrum of 4 or 5 membranous leaves. Calyx very minute. Petals ovate, ſpreading, undivided, white or reddiſh. Fruit orbicular, furrowed, compreſſed.

The name of White-rot was given from a ſuppoſition that this plant cauſed the diſeaſe in ſheep called the rot; but it is doubtful if they will ever taſte it, and moſt people now attribute that diſeaſe to the animals inhabiting wet paſtures, where indeed the *Hydrocotyle* grows, but which are in ſome other way noxious to their conſtitution.

J. Sowerby delt. Aprl. 1793

SANICULA europæa.

Wood Sanicle.

PENTANDRIA Digynia.

GEN. CHAR. *Umbels* cluſtered in little heads. *Fruit* rough. Central *flowers* abortive.

SPEC. CHAR. Radical leaves ſimple. Flowers all ſeſſile.

SYN. Sanicula europæa. *Linn. Sp. Pl.* 339. *Hudſ. Fl. An.* 110. *With. Bot. Arr.* 266. *Relh. Cant.* 108.
Sanicula ſive Diapenſia. *Raii Syn.* 221.

COMMON enough in woods, growing among dead leaves of trees, and flowering with the firſt heralds of ſummer in May. Gerarde ſays "it joyeth in a fat and fruitfull moiſt ſoile." He alſo remarks that "it is uſed in potions which are called Vulnerarie potions, or wound drinkes, which make whole and ſound all inward wounds and outward hurts." Unhappily the experience of mankind ſince good Gerarde wrote has rather impaired the credit of ſuch ſovereign medicines. Ignorance is ever prone to confidence and wonder. The herb is bitter and pungently aromatic, but ſeems to partake of that viroſe acrimony uſual in umbelliferous plants which "joy in a fat and moiſt ſoile," and which is improved to a wholeſome aromatic flavour in dry elevated ſituations.

The root is perennial, with long branched fleſhy fibres. Leaves moſtly radical, elegantly lobed and ciliated, deep green above, paler and more ſhining beneath. Stem twelve or eighteen inches high, but little branched, furrowed. Flowers often reddiſh. The central flowers of each little head or umbel have no ſtyles, but in their place a glandular nectary (*Withering*). The petals are all nearly equal; they are wanting in the ſeed-bearing flowers, as Scopoli remarks.

Sanicula S

BUPLEURUM rotundifolium.

Thorow-wax.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* longer than the umbels, five-leaved. *Petals* curled in. *Fruit* roundiſh, compreſſed, ſtriated.

SPEC. CHAR. No general involucrum. Leaves perfoliate.

SYN. Bupleurum rotundifolium. *Linn. Sp. Pl.* 340. *Hudſ. Fl. An.* 111. *With. Bot. Arr.* 267. *Relh. Cant.* 108.

B. perfoliatum rotundifolium annuum. *Raii Syn.* 221.

A SOMEWHAT unfrequent annual in corn-fields, generally preferring a dry and chalky ſoil. Mr. Lewin communicated it from the neighbourhood of Dartford in Kent.

This herb like the Sanicle has the reputation of being a vulnerary, a quality which no medicine can have, any otherwiſe than as a tonic ſtrengthening the conſtitution, nor can any external application be ſpecifically healing or conſolidating, nor be uſeful in any other way, than as a defence from the air.

The root is ſmall and fibrous. Stem alternately branched, a little zigzag, clothed with ſingularly perfoliate leaves, which have occaſioned the Engliſh name, from the old word *wax*, to grow. Both leaves and involucra are entire and ſharp pointed. The flowers are yellowiſh and inconſpicuous, coming out in June and July. Every part of the herb is remarkably hard and rigid, and has a ſlight aromatic ſmell.

Bupleurum 9

Bupleurum tenuissimum

Slender Thorow-wax or Hares Ear

Pentandria Digynia

Gen. Ch. Involucrum longer than the Umbels 5 leaved. Petals curled in. Fruit roundish compressed striated

Spec. Ch. Umbels simple alternate of about 3 flowers with an Involucrum of 5 awl shaped leaves.

Gathered in plenty by Mr T. F. Forster on the Shore near Worthing in Sussex. It prefers a muddy soil overflowed by Salt Water. Flowers in August & Sept.

Bupleurum

Cancalis 10

Caucalis Anthriscus — Upright Hedge Parsley

Pentandria Digynia

Gen. Ch. Involucr. general & partial undivided

Cor. radiate flowers of the Centre male

Fruit nearly oval striated rough

with rigid bristles

Spec. Ch. Umbels of many close Rays. gen.

Involucr. of many leaves. leaflets pinnatifid

branches nearly upright

Linnaeus undoubtedly errs in referring this

plant to the Genus Tordylium. Its bristly

seeds abortive flowers whole structure & habit

make it a Caucalis — few Weeds are

more general in hedges & borders of fields the

flowers which are either white or reddish are

most abundant in July & the Seeds ripen

in Augt. & Sept. Root annual & tapering

Stem erect 2 or 3 feet high rough with close

set depressed bristles dividing into several

nearly upright branches. Leaves alternate

bipinnate rough the leaflets opposite and

deeply serrated the terminal one longest. Um-

bels terminal erect of numerous rays but little spreading & furnished with a short Involucre of several sharp rough entire leaves. The partial Involucre is similarly formed. Partial Umbels flattish dense. Flower radiate & irregular. The is no great degree. Fruit small rough with simple uncinate bristles. its summit tinged with purple. This Caucalis is neither noxious nor remarkable for any properties of known activity —

J.ª Sowerby del.t Sept.r 1. 1794.

CAUCALIS nodoſa.

Knotted Caucalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. Umbels lateral, ſimple, nearly ſeſſile.

SYN. Caucalis nodoſa. *Hudſ. Fl. An.* 114. *With. Bot. Arr.* 273. *Relh. Cant.* 111. *Sibth. Oxon.* 93.
C. nodoſa echinato ſemine. *Raii Syn.* 220.
Tordylium nodoſum. *Linn. Sp. Pl.* 346.

COMMON on banks and about the borders of fields, eſpecially on a gravelly or calcareous ſoil, flowering from May to July, after which its dry ſtalks and heads of ſeeds remain for a conſiderable time, and become bleached at length by the weather.

Root annual. Stems proſtrate, branched, leafy, ſtriated, roughiſh with reflexed hairs. Leaves bipinnate, and ſharply cut; oppoſite to each of which, and often partly embraced by its ſheathing footſtalk, ſtands a ſmall ſimple umbel of ſeveral minute, white or reddiſh, ſcarcely radiating, flowers, each on a very ſhort flowerſtalk, and ſurrounded by linear hairy involucra. The germens and ſeeds, both in the Linnæan ſpecimens and in ours, are all rough, the inner ones with warty points, the outermoſt, and eſpecially on their outſide, with longiſh, ſtraight, rough, rigid hairs, as in other ſpecies of Caucalis, to which genus (and not to Tordylium) this plant is ſurely to be referred upon that account, whether it has any abortive flowers or not. Future obſervations muſt decide whether the ſmoother ſeeds of the centre are ever really abortive, or deſtitute of a vegetative principle. Practical obſervers of nature in the country have it in their power to clear up many points of this kind, relative to the moſt common plants, which, if communicated from time to time to thoſe who have the means of making them public, would materially advance the intereſts of ſcience.

Cacalis

J.ª Sowerby delt Augt 1, 1794.

CAUCALIS daucoides.

Small Caucalis or Baſtard Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, without involucra: partial ones ripening about three ſeeds, and furniſhed with a three-leaved involucrum.

SYN. Caucalis daucoides. *Linn. Syſt. Veg. ed.* 14. 276. *Hudſ. Fl. An.* 112. *With. Bot. Arr.* 271. *Relh. Cant.* 109. *Sibth. Oxon.* 92.

C. leptophylla. *Hudſ. Fl. An. ed.* 1. 99. *Linn. Sp. Pl. ed.* 1. 242 ? *ed.* 2. 347.

C. tenuifolia, floſculis ſubrubentibus. *Raii Syn.* 219.

C. albis floribus. *Ger. em.* 1021.

FOUND, though rarely, in cornfields where the ſoil is dry and chalky, moſt plentifully in Cambridgeſhire, flowering in the early part of ſummer.

The root is annual and tapering. Stem branched and divaricated, ſomewhat zigzag, deeply grooved, a little hairy at the joints only. Leaves three-cleft at their baſe, then thrice compounded, their ſegments very narrow, divaricated, pointed, decurrent and ſmooth, of a pale green. Umbels lateral and terminal, on long footſtalks, of ſcarcely more than 3 rays, though thoſe are ſometimes accompanied by 1 or 2 weak and barren ones. General involucrum none. Partial umbels of about 5 almoſt ſeſſile flowers, of which 3 only perfect their ſeeds, and are accompanied by 3 ſmall lanceolate involucella. Petals nearly equal, generally reddiſh. Germen and ſeeds clothed with rigid hooked briſtles, intermixed with hairs, but we do not perceive thoſe hairs to be, as Linnæus ſays, verticillated. That author is ſingularly confuſed in his accounts of this genus, nor are we quite ſure of what he meant at firſt by C. leptophylla. It is however certain, that the long deſcription of C. daucoides in both editions of *Sp. Pl.* belongs to C. grandiflora, and not (as erroneouſly mentioned in *Syſt. Veg.*) to C. platycarpos, whatever Linnæus might at any time intend by the latter.

J.d Sowerby delt Aug.t 1794.

CAUCALIS latifolia.

Broad-leaved Caucalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, with membranous involucra: partial ones ripening about 5 ſeeds. Leaves pinnated, ſerrated.

SYN. Caucalis latifolia. *Linn. Syſt. Veg. ed.* 14. 276. *Hudſ. Fl. An.* 113. *With. Bot. Arr.* 271. *Relh. Cant.* 110.

C. arvenſis echinata latifolia. *Raii Syn.* 219.

Tordylium latifolium. *Linn. Sp. Pl.* 345. *Hudſ. Fl. An. ed.* 1. 98.

THIS is rather leſs frequent than the laſt, but thrives in the ſame kind of ſoils and ſituations. It is one of the moſt beautiful of umbelliferous plants, and makes a conſpicuous appearance in the dry fields of Cambridgeſhire in July.

Root annual. Stem taller and leſs ſpreading than in C. daucoides, but as deeply furrowed, and more rough. Leaves rather glaucous, rough, ſimply pinnated, ſerrated; the lower pair of leaflets ſometimes compound at the baſe. Umbels of rarely more than 3 rays, with a general involucrum of 3 or 4 ſhort ovate leaves, ribbed in the middle, with a membranous border. Partial umbels of ſeveral nearly ſeſſile flowers, of which about 5 come to perfection. Partial involucra like the general ones. Flowers red, a little radiate. Seeds very rough with reddiſh upright ſtraight rough briſtles.

Bunium 12

Bunium flexuosum Comm. Earth Nut

Pentandria Digynia

Gath. Inv.re general & partial. Corolla
uniform Umbels dense Fruit ovate

Spec Ch. Gen.l Inv.r of scarcely 3 leaves
Stem at the base tapering Tyrsy & naked

A well known Inhabitant of gravelly
Pastures whose white flowers are conspicuous
thro' the Month of June & whose roundish fleshy
roots are eagerly sought by Boys & perhaps
for their sweetish pungent flavor. Mem for the
amusement of tracing them to their deep situ
ation by means of the slender tapering & tender
basis of the Stem. If this Clue be lost it is not
easily recovered. These Roots are perenl.
Stem about a foot high smooth branched &
hairy upwards. Leaves Pinnately multifid narrow
linear uniform segments smooth bright green
The radical ones on long taper Tyrsy stalks
Umbels terminal erect many rays. Gen.l
Involr. of 1 to 3 small linear leaves often

altogether wanting. Involucrum of several
Dark leaves. Petals regular. Fruit o-
vate smooth tipped with purple

Fl. 1795 Published by T. Rawlins

SELINUM paluſtre.

Marſh Milky Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval-oblong, compreſſed, ſtriated down the middle. *Involucra* general and partial, reflexed. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Milky. Root generally ſingle. Stem ſolitary. Styles much divaricated after flowering. Petals involute.

SYN. Selinum paluſtre. *Linn. Sp. Pl.* 350. *Hudſ. Fl. An.* 115. *With. Bot. Arr.* 281.

GATHERED by Dr. Smith July 28, 1794, in the ditches of a very wet reedy meadow between Norwich and Heigham, where it was firſt obſerved by Mr. Pitchford. Ray ſeems not to have known this plant to be a native of England.

Root ſomewhat ſpindle-ſhaped, with ſeveral fibres from the top. Stem ſolitary, erect, four or five feet high, hollow, deeply furrowed, not hairy, bright purple at the baſe, bearing five or ſix remote alternate leaves; the lowermoſt on long furrowed footſtalks, with ſheathing reddiſh ſtipulæ, and all twice or thrice oppoſitely pinnated, and cut into narrow, pointed, oppoſite or alternate, ſmooth ſegments, of which the terminal ones are longeſt. The upper part of the ſtem is alternately branched, in a corymboſe manner, bearing many large, horizontal, compound umbels of white flowers, on pale purpliſh footſtalks. Involucra of ſeveral ſhortiſh, dependent, lanceolate, pointed leaves, with membranous edges. Petals uniform, inflexed. Fruit elliptical, ſharp edged.

The whole plant abounds with a white, bitter, fœtid juice, of the conſiſtence of cream, which ſoon dries to a browniſh reſin. The Ruſſians are ſaid to uſe the root inſtead of ginger.

Dr. Stokes juſtly remarks (*Bot. Arr.*) that Jacquin's Selinum ſylveſtre, figured in *Flo. Auſtriaca*, is this plant, and not the ſylveſtre of Linnæus. This we have verified by comparing original ſpecimens. In both however the ſtem is furrowed. The difference of one having a ſolitary ſtem, the other a great number, ſeems more certain than the difference of the roots.

Selinum 13

ATHAMANTA Libanotis.

Mountain Stone-Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* ovato-oblong, convex, ſtriated. *Petals* uniform, inflexed, ſo as to ſeem notched. *Involucrum* both general and partial.

SPEC. CHAR. Leaves bipinnated, flat. Umbels hemiſpherical. Seeds hairy.

SYN. Athamanta Libanotis. *Linn. Sp. Pl.* 351. *Relh. Cant.* 113 *fig.* *With. Bot. Arr.* 283. *Hudſ. Fl. An.* ed. 1. 100.

A. Oreoſelinum. *Hudſ. Fl. An.* 115. *With. Bot. Arr.* 283.

Apium petræum ſeu montanum album. *Raii Syn.* 218.

IN the time of Ray, this plant was known to grow wild on Gogmagog hills, Cambridgeſhire; but from that period no botaniſt has met with it there till the year 1783, when it was detected by the Rev. Mr. Relhan, to whom we are obliged for the wild ſpecimen here repreſented. Whether the plant Mr. Hudſon gathered between St. Albans and Stoney Stratford be the ſame, we have no means of determining: probably it might. That gentleman rightly referred Ray's plant to the A. Libanotis in his firſt edition; but in the ſecond, miſled as it ſhould ſeem by Linnæus in Sp. Pl. he calls it A. Oreoſelinum, a very different ſpecies, as appears from the Linn. Herb. Hence aroſe the miſtake of Dr. Withering, who has both plants in his Bot. Arr.

The root is perennial, running perpendicularly down, ſomewhat woody, bitteriſh, and pungent, bearded at the top with the fibrous remains of old leaf-ſtalks. Stem one or two feet high, erect, little branched, ſmooth, angular, and (as Ray obſerves) often very deeply furrowed. Leaves bipinnate; leaflets ſeſſile, pinnatifid, with pointed entire lobes, firm, veiny, paler beneath, ſmooth, except a ſlight hairineſs on the veins and margin. Footſtalks dilated at the baſe, with a membranous border. Umbels terminal, erect, whitiſh. Involucra numerous, ſubulate, with a membranous margin, hairy. Flower-ſtalks, calyx, and germen, hairy, as is likewiſe the fruit. After flowering, the ſtyles and top of the germen become purple, as Linnæus remarks. The umbels are ſometimes proliferous. This plant blooms copiouſly in Auguſt. We have repreſented a magnified flower to ſhew the inflexion of the petals, and the half-ripe fruit with its purple divaricated ſtyles.

Athamanta ×13×14

Crithmum 14

Crithmum Maritimum Sea Samphire

Pentandria Digynia

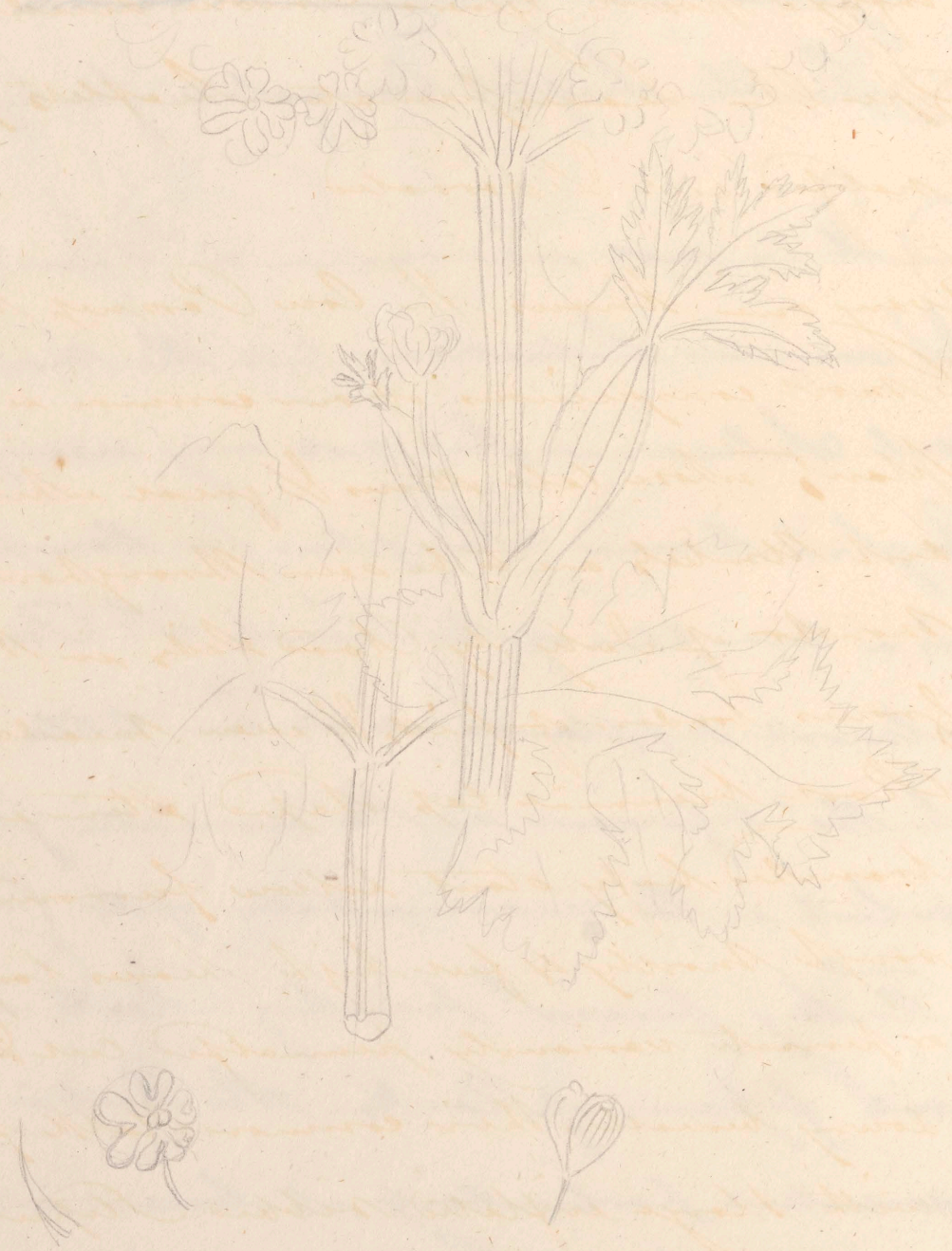
Gen. Ch. Umbel general & partial —
Fruit oval compressed striated — flowers
regular Cal. entire.

Spec. Ch. Leaflets lanceolate fleshy

It is not uncommon on Dover Cliff
& similar situations but the more univer-
sal Salicornia has not only usurped its
English name Samphire (or Sampire as it
is a corruption of the French St. Pierre) but
almost supplanted it at our tables as a pick-
le tho' deficient in the aromatic flavour
which is the recommendation of the Crithmum
The long spreading fleshy Roots run deep
into fissures of Rocks — The leaf is fleshy &
succulent particularly its leaves which are
trifid or thrice ternate entire & almost linear
very unlike those of any other British um-
belliferous plant their Col.r a little glaucous

Umbels dense Hemispherical — General & par-
tial Involc. small ovate undivided. Flow.
greenish white all regular & fertile — Marg.
Petals incurved broad at the base obtuse
most of this tribe the Petals are furnished
with Claws. Fruit elliptical furrowed
fleshy smooth

Heraclyum 15



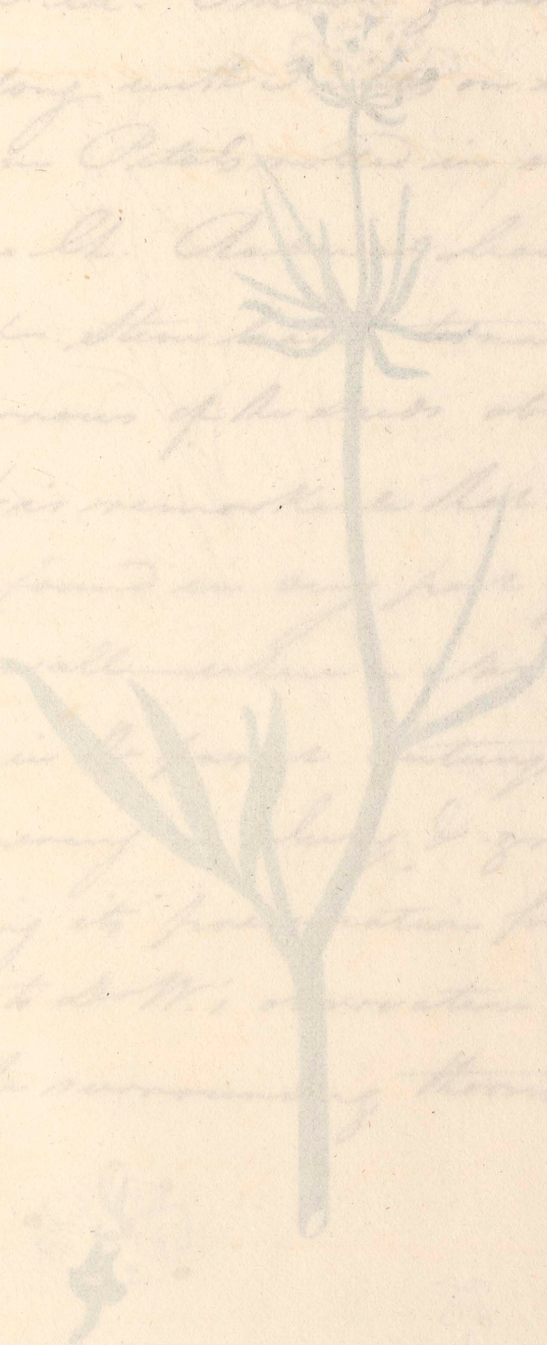
Heracleum Spondylium — Com. Cow Parsnip

Pentandria Digynia

Gen. Ch. Fruit elliptical noted com-
pressed striated bdated in the margin
Flowers radiant. Petals noted with an
inflexed point. General Involu. deciduous
Spec. Ch. Leaves pinnate — leaflets pin-
natifid cut & serrated

Every one knows the Cow Parsnep the largest
& most conspicuous of our common umbelliferous
plants whose tall stems & great white or red-
dish Umbels are to be seen throughout the
months of July by Road Side, in Thickets
Grows borders of fields & even meadows
Root biennial tap shaped stem erect
branched hairy stout hollow furrowed &
rough mostly 4 feet high leaves large ternate
or pinnate variously pinnatifid cut & serrated
downy beneath their common stalk furnished
with a large inflated ribbed Stipule
Umbels flattish of many Rays — General
& partial Involucra of several lanceolate
deep leaves the former in particular soon falling off Petals
unequal inversely heart shaped with an inflexed

tooth between the lobes a circumstance common
to many flowers of this Natural Order
but in none more conspicuous than in the
outermost petals of the present Plant
Fruit elliptical broad & flat smooth
with 3 ribbs on each side



Legisticum Conubiense — Comit Lovag

Pentandria Digynia

Gen. Ch. Involucrum general & partial. fruit oblong with 3 ribbs on each side. Cor. uniform Petals rolled in entire Cal of 5 teeth

Spec Ch. Radical leaves twice compound cauline Stem leaves ternate lanceolate entire Furrows of the seeds obsolete —

It is remarkable that this Plant has never been found in any part of the World except Cornwall — when a Mr Stevens discovered it early in the present Century It is perennial flowering in July. It grows in bushy fields owing its preservation from Cattle who according to Dr W.'s observation are very fond of it to the surrounding thorns & briars

J.t Sowerby del.t Oct.r 1, 1793.

SIUM anguſtifolium.

Narrow-leaved Water Parſnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compreſſed, ſtriated. *Involucrum* general and partial, of many leaves. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets irregularly lobed and ſerrated. Umbels on foot-ſtalks oppoſite to the leaves. Stem erect.

SYN. Sium anguſtifolium. *Linn. Sp. Pl.* 1672. *Hudſ. Fl. An.* 119. *With. Bot. Arr.* 292. *Relh. Cant.* 116.

S. erectum. *Hudſ. Fl. An.* ed. 1. 103.

S. ſive Apium paluſtre, foliis oblongis. *Raii Syn.* 211.

THIS is frequently found in ditches and rivulets, and having been originally conſidered by Linnæus as a variety of S. latifolium, was firſt eſtabliſhed as a diſtinct ſpecies by Mr. Hudſon. The Rev. Mr. Relhan ſent this ſpecimen from near Cambridge. It flowers in July and Auguſt.

Root perennial, creeping, ſo as to occupy much ſpace. Stem upright, with whorls of radical fibres in its lower part under water, round, ſtriated, ſmooth, much branched above. Leaves alternate, ſimply pinnated; leaflets ſeſſile, the lowermoſt pair remote from the reſt, and ſmaller, at leaſt in the lower leaves, in which alſo the leaflets are obliquely heart-ſhaped at the baſe; otherwiſe they are lanceolate, often ſo deeply lobed as to become haſtate, pointed, very irregularly and ſharply ſerrated, and very ſmooth. The umbels ſtand ſolitary, oppoſite to each leaf, on divaricated footſtalks ſomewhat ſhorter than the adjoining leaf. General involucrum of many drooping leaves, which are occaſionally entire, ſerrated or pinnatifid; the partial ones are oval and more entire. Calyx of five minute teeth. Petals heart-ſhaped, with an inflexed claw from the ſinus, all uniform. Stamina twice as long as the corolla, ſpreading. Fruit ſmooth, ſlightly ribbed, oval.

J. E. Sil. 1. 1794

SIUM latifolium.

Broad-leaved Water Parſnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compreſſed, ſtriated. *Involucrum* general and partial, of many leaves. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets oblong-lanceolate, equally ſerrated. Umbels terminal.

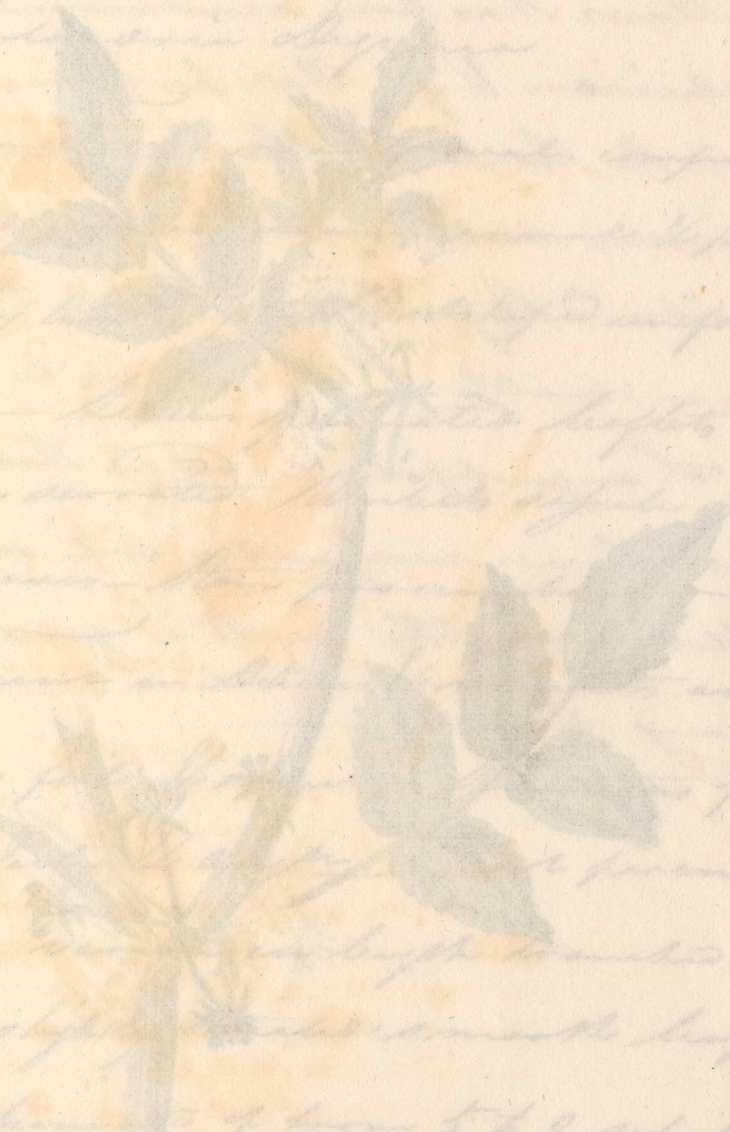
SYN. Sium latifolium. *Linn. Sp. Pl.* 361. *Hudſ. Fl. An.* 118. *With. Bot. Arr.* 291. *Relh. Cant.* 115. *Sibth. Oxon.* 96.

S. latifolium foliis variis. *Raii Syn.* 211.

SENT by Mr. Woodward from Norfolk, where it is not uncommon, nor is it of very rare occurrence in rivers and fens throughout England; but the umbelliferous tribe has been more overlooked than moſt others, except Cryptogamia. This is one of the largeſt Britiſh plants of that tribe. Its perennial root, creeping among mud and gravel, throws up round, hollow, deeply furrowed ſtems 4 or 5 feet in height, clothed with alternate leaves, compoſed of 7 or 9 leaflets, which vary much in breadth, but are always very equally and neatly ſerrated, in which reſpect they differ materially from S. anguſtifolium, as well as in being much longer. Mr. Hudſon well remarks, that ſuch as grow under water are often laciniated. The umbels are terminal, large, and many-flowered. Involucra various in ſize and figure, ſometimes lobed and often ſerrated. Seeds ſmall.

It is a plant of an acrid poiſonous quality, particularly the roots.

5 Ae 98c



Sium nodiflorum. Procumbent

Water Parsnip

Pentandria Digynia

Gen. ch. Fruit nearly oval. compressed striated Involucrum general & partial of many leaves. Petals heart shaped uniform

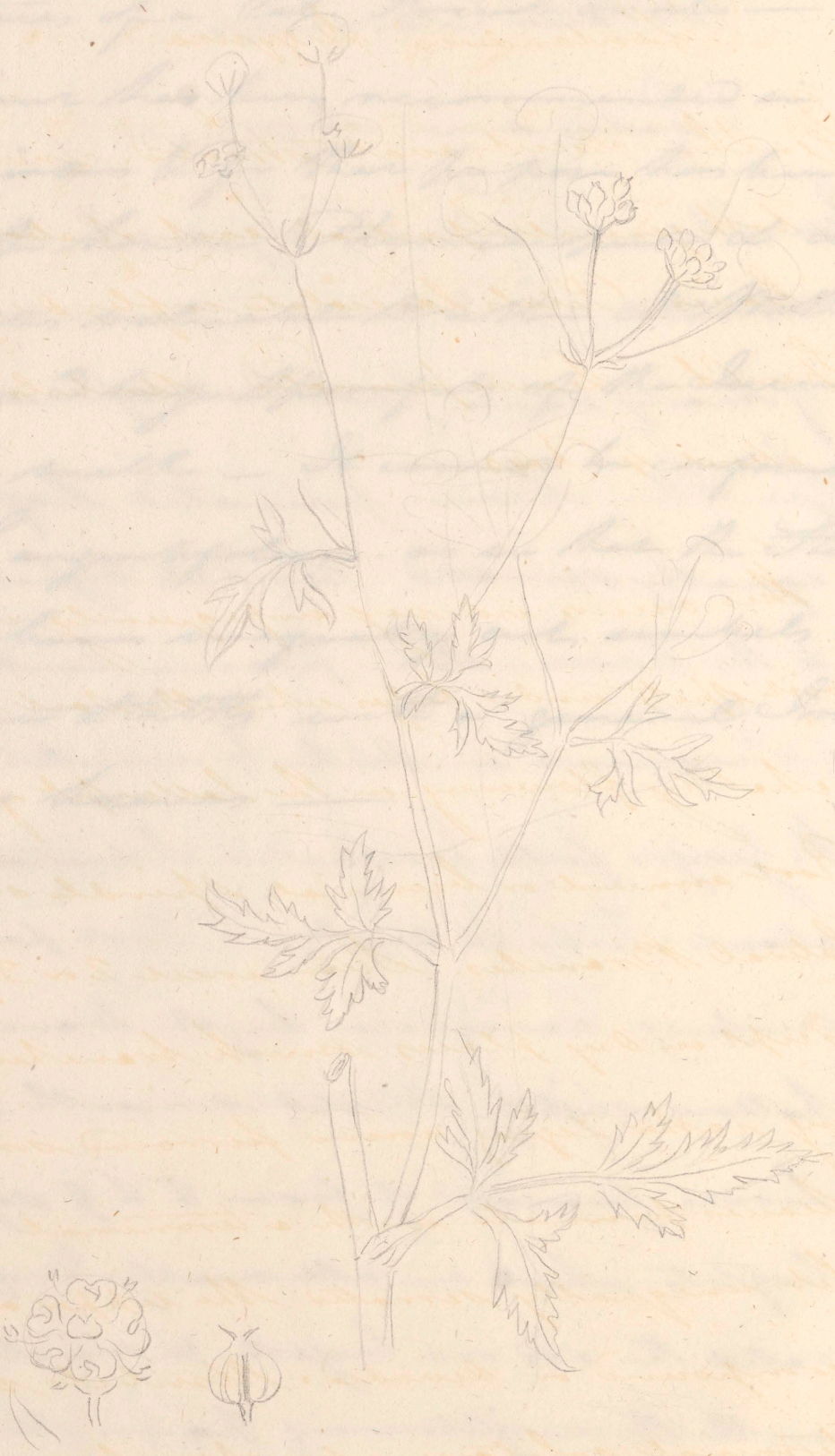
Spec. ch. Leaves pinnated leaflets ovate equally serrated Umbels axile opposite to the leaves. Stem procumbent

Frequent in ditches & rivulets as at St. Georges fields & similar situations flowers about July & augt. Root perennial creeping. various in length branched round hollow slightly striated smooth hairy leaves pinnate of from 5 to 9 axile ovate leaflets. which are alternately & equally serrated the odd one largest. & sometimes united with the neighbouring pair. Umbels lateral opposite to the leaves solitary nearly axile of about 5 or 7 divaricated rays. bearing little umbels of 12 or more flowers. General Involucrum of but 1 leaf & often entirely wanting. Partial of several ovate

concave leaves as long as the partial flower-
stalks — flowers small greenish White with
slight traces of a Cal. Fruit ovate —

This Plant has been recommended in cu-
rious diseases & for that purpose has been re-
tained in the London Pharmacopeia & Dr
Woodvilles valuable Work — Dr Withering
prescribes 3 large Spoonfuls of the Juice 2
a day in milk — It cannot be confounded
with S. angustifolium. as in that the Stem
is erect leaves unequally cut, umbels on
long flower stalks with a general Involu-
of many leaves —

Lesson 10



Sison Amomum — Hedge Honewort

Pentandria Digynia

Genth — Fruit ovate striated. Involucra both general & partial each of about 4 leaves. Petals lanceolate inflex &

Spec Ch — Leaves pinnated. Umbels erect of about 4 Rays

This occurs not very unfrequently in rather moist Spots under hedges when the Soil is marly or Chalky. flowering in the latter pt of Summ. Root annual or biennial Spindle shaped with lateral Branches. Stem erect 2 or 3 feet high except in Dry places much branched & spreading rather zigzag round furrowed smooth hoary leaves pinnate with a terminal lobed leaflet unequally serrated the upper ones more compound or divided. Umbels numerous terminal solitary. upright when in flower composed of about 4 seldom more unequal rays. with a small Head general Involucr Partial Umbels likewise of best few & unequal rays with a minute 4 leaved partial Involucr

Flowers of 5 white inflex'd petals. broader th
those of S. agetum. Cal. scarcely perceptible
Fruit ovate short compress'd ribbed.

The Seeds are aromatic & pungent when ri
& dry but in an early stage they like the
whole herb have a peculiar nauseous
smell

J. Sowerby Del.t Oct.r 1792.

SISON inundatum.

Water Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, ſtriated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Creeping. General umbel of only two rays, and wanting a general involucrum.

SYN. Siſon inundatum. *Linn. Sp. Pl.* 363. *Hudſ. Fl. An.* 120. *With. Bot. Arr.* 295. *Relh. Cant.* 117. *Sibth. Oxon.* 98.

Sium puſillum, foliis variis. *Raii Syn.* 212.

THIS we believe is not a very unfrequent inhabitant of wet places that are overflowed in winter, as well as of ditches and pools among other aquatics. Moſt authors, except Ray, make it annual. Others, as Linnæus, do not pretend to decide upon its duration, in which claſs we muſt humbly rank ourſelves, only obſerving that from its flowering ſo early as May, it is probably at leaſt biennial.

The round, partly floating, ſtem throws out a few long ſimple fibres from the bottom, and is furniſhed with alternate pinnated leaves, whoſe membranous ſheathing ſtipulæ embrace the ſtem. Such leaflets as are above the water are commonly wedge-ſhaped, and three-cleft, ſometimes elliptical and undivided; thoſe that are under water, eſpecially at any depth, are finely divided into capillary ſegments, as in Ranunculus aquatilis. See a good remark on this ſubject in Ray's Synopſis, 212. The umbels are placed oppoſite to each leaf, juſt within the ſtipula, on longiſh footſtalks, and conſiſt of only two partial umbels, without any general involucrum. Each partial umbel has about five white, ſlightly radiant, flowers, with oval, entire, ſpreading petals. Fruit compreſſed and ſtriated.

We cannot help thinking this plant belongs rather to Hydrocotyle than to any other genus.

Sison

May 1st 1797 Published by J. Sowerby London

SISON verticillatum.

Whorled Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, ſtriated. *Involucra* both general and partial, each of about 4 leaves.

SPEC. CHAR. Leaflets in capillary, whorled ſegments.

SYN. Siſon verticillatum. *Linn. Sp. Pl.* 363. *Hudſ. Fl. An.* 120. *With. Bot. Arr.* 295. *Lightf. Scot.* 1096. *t.* 35.

A STILL more uncommon plant than the laſt. Mr. Mackay, nurſeryman, near Edinburgh, ſent a young root of it from Scotland, which flowered the following year, and from thence our figure was taken. It grows in moiſt meadows in the lowlands of North Britain, and has alſo been obſerved in conſiderable plenty in the flat parts of Wales. It is perennial, flowering about July and Auguſt.

The root conſiſts of oblong fleſhy radicles, tapering to a point. Stem 12 or 18 inches high, erect, round, ſtriated, but little branched, and almoſt naked. Leaves moſtly radical and very remarkable, conſiſting of a ſimple rib, along which are arranged pairs of deeply cloven leaflets, whoſe numerous ſegments are linear, acute, extremely narrow, pointing in all directions, ſo as to form whorls, and that as truly as the flowers do in the *Menthæ* and other whorled plants, properly ſo called, for thoſe grow only on two ſides of the ſtem, though they ſeem to embrace it all round. Umbels erect, of about 8 or 10 rays, with a general involucrum of 3 or 4 ſhort ovate pointed leaves. Partial umbels more denſe, and nearly flat, with ſimilar, but more numerous, involucra. Petals nearly equal, inflexed, white. Antheræ purpliſh. Germen ovate, ſtriated. Fruit ſlightly compreſſed, deeply furrowed, crowned with the ſhort recurved permanent ſtyles. The ſeeds are ſlightly, but not pleaſantly, aromatic.

Linn

J.C. Sowerby del.t Oct.r 1794.

SISON ſegetum.

Corn Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, ſtriated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Leaves pinnated; leaflets roundiſh. Umbels drooping.

SYN. Siſon ſegetum. *Linn. Sp. Pl.* 362. *Hudſ. Fl. An.* 120. *With. Bot. Arr.* 294. *Relh. Cant.* 117. *Sibth. Oxon.* 97.

Sium arvenſe ſive ſegetum. *Raii Syn.* 211.

Selinum Sii foliis. *Ger. em.* 1018.

COMMUNICATED from fields near Kelmarſh, in Northamptonſhire, by William Hanbury, Eſq. It has been obſerved in ſeveral parts of England in a chalk or clay ſoil, but not very frequently. Meſſrs. Forſters find it at Walthamſtow. It flowers in July, and is annual in general, though often biennial, as we find remarked by that accurate obſerver Mr. John Goodyer, in Gerarde's Herbal. His whole account of this herb, with the origin of its name *Honewort* (from its curing a ſwelling in the cheek, called a Hone), with all the hiſtory of "Miſtris Urſula Leigh," and "Miſtris Charitie Leigh," is a model of accurate inquiry and preciſe information.

Root ſmall, but ſtrong. Stems ſeveral, ſpreading in every direction, ſlender and ruſh-like, but branched and furniſhed with ſeveral alternate pinnated leaves. The radical leaves are the largeſt, conſiſting of from ſeven to fifteen neat little roundiſh leaflets, ſharply ſerrated, and ſcarcely lobed. The general umbels are of very few and unequal rays; the partial ones are drooping, and, as Goodyer ſays, "uneven or unorderly," their flower-ſtalks being very various in length. Flowers very ſmall. Petals regular, incurved. Antheræ purple. Fruit ſtriated, pungent and aromatic, as is the whole plant in ſome degree.

Sept.r 1796 Published by J.t Sowerby London

OENANTHE peucedanifolia.

Sulphur-wort Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: thoſe of the diſk ſeſſile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets all linear. General involucrum none. Knobs of the root ſeſſile, elliptical.

SYN. Oenanthe peucedanifolia. *Pollich Plant. Palat. vol.* 1. 289. *t.* 3. *Sibth. Ox.* 98.

SENT by W. Mathew, Eſq. from near Bury, and by the Rev. Mr. Abbot from the neighbourhood of Bedford. Profeſſor Sibthorp alſo found it in ſeveral places about Oxford, as mentioned in his Flora. No other Britiſh author has noticed this ſpecies, probably having confounded it with O. *pimpinelloides*, which is rather a maritime plant, while *peucedanifolia* grows in freſh inland waters.

The root of this conſiſts of thick oval or elliptical knobs, which taſte ſomething like parſnep, but are probably dangerous food. Stem thicker than in the preceding, as well as taller and more erect. Radical leaves bipinnate; ſtem-leaves ſcarcely more than pinnate; leaflets all linear and acute, by which it is at once diſtinguiſhed from the preceding, as well as by the want of a general involucrum, of which there are ſcarcely ever any ſigns. The rays of the general umbel are alſo fewer and much thicker than in O. *pimpinelloides*, and the calyx is more erect. The flowers appear in June, and are often reddiſh, the marginal ones frequently female only, being impregnated by thoſe of the centre.

Dec.r 1. 1796 Published by J.r Sowerby London.

OENANTHE fiſtuloſa.

Common Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: thoſe of the diſk ſeſſile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Root ſending forth runners. Stem-leaves pinnated, cylindrical, tubular. General involucrum, for the moſt part, wanting.

SYN. Oenanthe fiſtuloſa. *Linn. Sp. Pl.* 365. *Hudſ. Fl. An.* 121. *With. Bot. Arr.* 296. *Relh. Cant.* 117. *Sibth. Ox.* 98.

O. aquatica. *Raii Syn.* 210.

EXCEEDINGLY common in wet ditches, ponds and rivers, flowering in July. The root is fibrous and perennial, ſending forth under water ſeveral creeping runners, by which it is increaſed, and throwing up tall branching ſtems to a conſiderable height above the ſurface. Theſe ſtems are tubular, contracted at the joints, ſtriated, of a glaucous hue. Radical leaves bipinnate; the leaflets flat, wedge-ſhaped and lobed: ſtem-leaves alternate, pinnate; their leaflets and common foot-ſtalks cylindrical and hollow. Umbels on long, ſtrong, alternate ſtalks, lateral and terminal: general rays from 3 to 7 or 8, moſtly naked, but ſometimes furniſhed with one linear leaf of an involucrum: partial umbels with many rays, and a partial involucrum of ſeveral membranous leaves. Calyx-teeth ſharp and always ſpreading. Petals very unequal, with incurved points. Stamina long. Styles after impregnation much elongated, and erect, giving the ripening umbels a bur-like appearance. Stigmas capitate.

The variety β of Hudſon is a very trifling one. Dr. Stokes obſerves that in ſome ſituations this ſpecies acquires the habit of O. *pimpinelloides*, but may be readily known by the want of a general involucrum. We preſume this remark alludes to our O. *peucedanifolia*, ſee *t.* 348.

Sept.r 1. 1796 Published by J.t Sowerby London.

OENANTHE pimpinelloides.

Parſley Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: thoſe of the diſk ſeſſile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets of the radical leaves wedge-ſhaped, cloven; thoſe on the ſtem entire, linear, very long. General involucrum of ſeveral linear leaves.

SYN. Oenanthe pimpinelloides. *Linn. Sp. Pl.* 366. *Hudſ. Fl. An.* 121. *With. Bot. Arr.* 297.

O. Staphylini folio aliquatenus accedens. *Raii Syn.* 210.

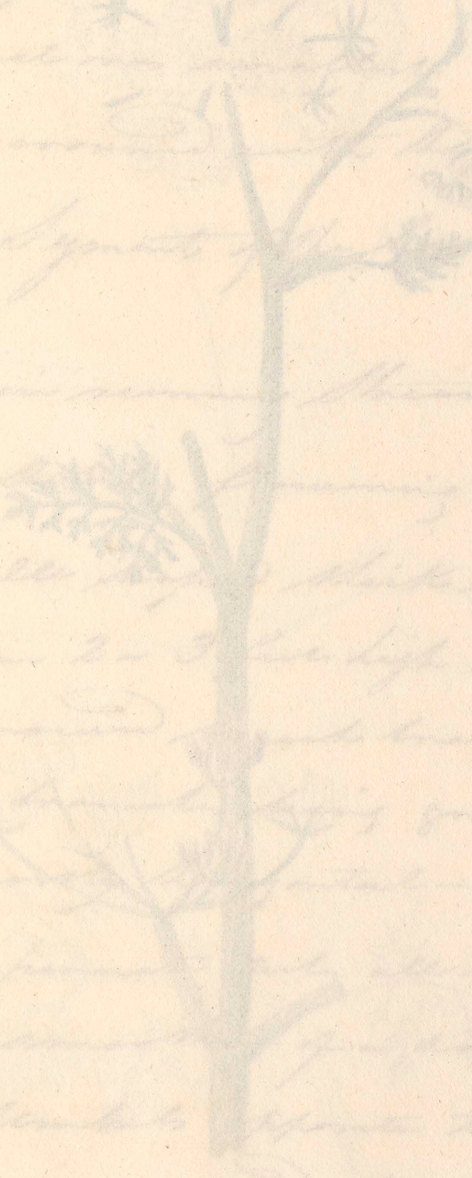
WE have received this from the Rev. Mr. Hemſted, and from the Rev. Mr. Hugh Davies. The latter gathered it in ſalt marſhes near Aber, North Wales.

Root perennial, conſiſting of ſeveral ſlender fuſiform fleſhy tubercles, intermixed with fibres. Stem erect, or aſcending, with ſo many angles as to be almoſt cylindrical, ſtriated, ſmooth, leafy, not much branched. Radical leaves bipinnate; the leaflets either elliptical and entire, or wedge-ſhaped, and more or leſs cloven: Stem-leaves pinnate, ſcarcely bipinnate; leaflets long, linear and acute. Umbels terminal. Involucra of ſeveral linear leaves, the partial ones moſt numerous. Calyx of 5 unequal, ſharp, ſpreading, conſiderable leaves. Petals unequal, with a point ſo inflexed as to render them inverſely heart-ſhaped, as in many of this tribe, ſometimes reddiſh on the back. The flowers appear in July, and perfect but few ſeeds.

This ſpecies is not eſteemed poiſonous, but the whole genus is certainly to be ſuſpected, on account of the very dangerous *Oenanthe crocata.*

Anancke 19

Phellandrium 10



Phellandrium aquaticum Water Hemlock

Pentandria Digynia

Gen. Ch. Gen. Involc. Flowers all fertile
The central ones smallest Fruit ovate
smooth crowned with the Cal. & Styles
Spe. Ch. Segments of the leaves divaricated
Frequent in running Streams as well as
stagnant Ditches flowering in June & July
Root spindle shaped thick with whorled
fibres Stem 2 or 3 feet high thick round
hollow furrowed much branched & very
bushy the branches being spreadly divari-
cated & mostly horizontal — leaves spread-
ing twice pinnate cut all the segments
divaricated smooth — of a dark shining
green — Umbels opposite to the leaves
spreading many rayed the partial ones
very dense. Partial Involc.: of many nar-
row leaves Fruit ovate a little compressed
smooth crowned with the erect cal. &
styles —

Cicuta 21

Cicuta virosa

Water Hemlock — Water Cowbane

Pentandria Digynia

Gen. Ch. No general Involucrum
Fruit nearly ovate furrowed. Cor.
almost ~~always~~ regular

Spec. Ch. Umbels opposite to the leaves
Stipulæ running up the flower Stalk,
blunt

Happily this dangerous Plant is not very
common. it grows in Ditches & the margins
of Rivers always under Water when young
in which Situations Cows & Bullocks to which
Animals it is a deadly poison sometimes by mis-
take eat it — by what Haller has collected it
appears also to be poisonous to Mankind by
quickly inflaming the Stomach as well as to the
Canine Genus — Horses Hogs & Goats eat it
with Impunity. Linnæus in his Flor a Lap-
onica gives a most exquisite detail of the

reasons which led them to conclude this Plant
to be cause of a terrible Disease among the Ca
at Tornea in Lapland by which he rendered a
invaluable Service to that Country

The Root is perennial tuberous & perforated
internally into several cavities by transverse
partitions. Stem branched furnished 3 or 4 feet
high. Leaves twice ternate the larger pinnate
their common Stalk bordered a great way up
by a membranous blunt Stipula. Leaflets lan
ceolate serrated smooth bright green — Umb
els on footstalks various in length, opposite
to each leaf consisting of several principal
Rays (without any general Involucrum) &
still more numerous short partial Rays
encompassed by an Involucrum of many
narrow lanceolate leaves. Calyx somewhat
campanulate. Petals nearly all of a deep rose
in white. Fruit ovalled of a short ovate figure
ribbed

The Cicuta virosa can hardly be confounded with
any other British Plant if the form of the leaves
& situation of the flowers be attended to. Its flavour
is fetid & pungent — if unfortunately taken into the
mouth a speedy Emetic is the best remedy or a dose of
Oil.

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J. Sowerby del. N° 1. 1792

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CORIANDRUM ſativum.

Coriander.

PENTANDRIA Digynia.

GEN. CHAR. *Corolla* radiate; *petals* inflexed, cloven. *General Involucrum* of one leaf; *partial ones* going but half way round. *Fruit* ſphærical.

SPEC. CHAR. The two ſeeds combining to make one uniform globe.

SYN. Coriandrum ſativum. *Linn. Sp. Pl.* 367. *Hudſ. Fl. An.* 123. *With. Bot. Arr.* 302.

Coriandrum. *Raii Syn.* 221.

CORIANDER is ſuppoſed to be a native of the ſouth of Europe, and, from having been cultivated in England as a medicinal plant, to have become naturalized in ſome parts of the kingdom, particularly in fields about Ipſwich.

The root is annual; lower leaves lobed and cut; upper ones in very fine linear alternate ſegments; flowers white or reddiſh, appearing in June; and the ſeeds are ripe in July and Auguſt. The aromatic flavour of the latter is agreeable to moſt palates; and we are obliged to Dr. Withering, for reſcuing them from the charge of unwholeſomeneſs (*Bot. Arr.*). All the reſt of the plant is, when bruiſed, abominably fœtid.

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Corandrum – 22

Scandix odorata — Sweet Cicely

Great Chervil

Pentandria Digynia

Gen. Ch. Gen Involv. o. Flowers radiant

Petals notched fruit awl shaped —

Central flowers often male —

Spe. Ch. Seeds furrowed angular smooth

Sent from the North of England by Mr

Robson flowering in May

The Root we believe is perennial Spin-

dle shaped & aromatic — Stems 1½ foot

high branched furrowed — Leaves deep

pale green hairy triply wing'd & pinna

tifid Lobules terminal ovate pointed

Rays — The partial Involucra lan-

ceolate reflexed membranous pale

Flowers white the central ones most nu-

merous & having abortive Germens

Seeds large about an inch long ovate

lanceolate awl'd not beaked furrowed

smooth of a shining brown with a

sweet aromatic flavour & crowned by

the spreading styles

Scandix 23

878

Scandix Anthriscus Roy. Gerard

Pentandria Digynia

Gen. Ch. Gen. Inval. o. Flowers radiate
Petals notched fourth and shaped. Central
flowers often Male

Spec. Ch. Seeds ovate bristly beaked
Cor. uniform Stem smooth

It is remarkable for growing almost
exclusively in the neighbourhood of large
towns — The banks of hedges & other dusty
much frequented places abound with
it in Spring Nor does the whole vegetable
Kingdom afford a more exquisite green
nor scarcely a more rich & elaborate foli-
age than the young plants of this Scandix dis-
play in the earliest months of the Year

Its beauty in that State readily distin-
guishes it from all its neighbours In May
the flowers are in Perfection & the seed soon
forms its Seeds & withers away

752.

July 1. 1800. Published by J. Sowerby.

CHÆROPHYLLUM ſylveſtre.

Smooth Cow-parſley.

PENTANDRIA Digynia.

GEN. CHAR. *General Invol.* none; *partial* reflexed, concave. *Petals* heart-ſhaped. *Fruit* oblong, ſmoothiſh.

SPEC. CHAR. Stem ſtriated, ſmooth; ſlightly ſwelling below the joints.

SYN. Chærophyllum ſylveſtre. *Linn. Sp. Pl.* 369. *Sm. Fl. Brit.* 326. *Hudſ.* 124. *With.* 308. *Hull.* 63. *Relh.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. faſc.* 4. *t.* 25. *Mart. Fl. Ruſt. t.* 96.
Cicutaria vulgaris. *Raii Syn.* 207.

FREQUENT about hedges in the borders of rather fertile paſtures, flowering about the end of April or early in May, being one of our earlieſt umbelliferous plants.

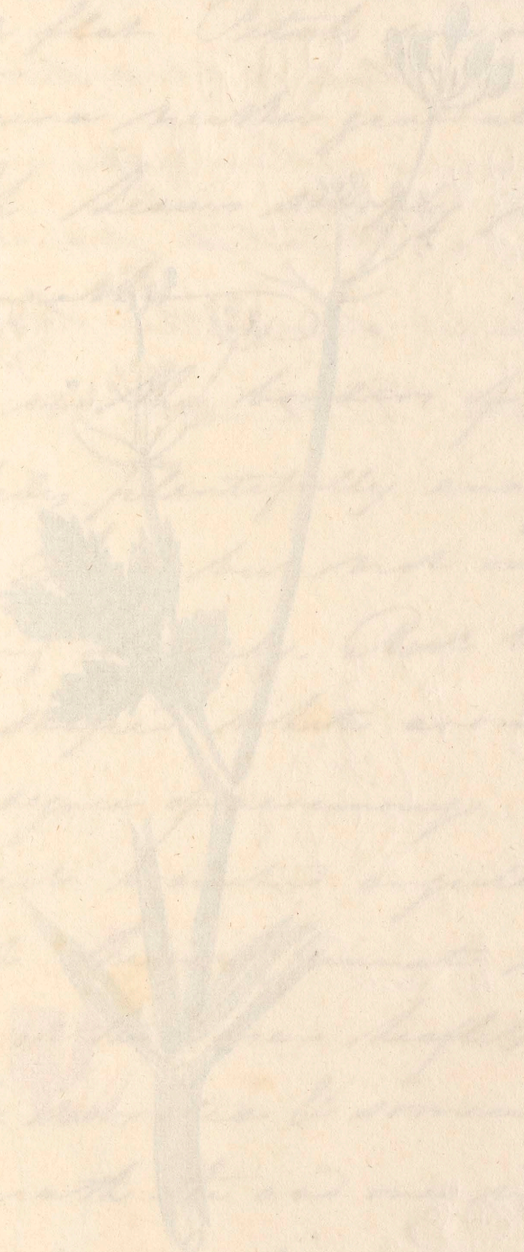
Root perennial, ſpindleſhaped, ſlightly milky, but little branched. Stem about 3 feet high, erect, branched, leafy, round, ſtriated, a little ſwelled below the joints, more eſpecially as the plant advances in age; it is for the moſt part downy towards the bottom, but the upper part is ſleek, and in general (though not always) devoid of pubeſcence. Leaves triply pinnate, the leaflets deeply cut, almoſt ſeſſile, rough at the edge. Umbels when young more or leſs drooping, though commonly leſs ſo than in C. *temulentum*; as the flowers expand they become quite erect. *Involucella* ovate, membranous, fringed with thick-ſet white hairs. Flowers whitiſh; their ſtalks ſmooth. Petals more or leſs notched, rarely entire, a little irregular. Fruit oblong, ſomewhat elliptical, compoſed of 2 nearly cylindrical ſeeds, externally very ſlightly ribbed, and deſtitute of all roughneſs.

The whole herb has a ſweetiſh carrot-like ſmell and taſte, and is eaten by domeſtic cattle. Rabbits are ſaid to be peculiarly fond of it.

The almoſt equally common C. *temulentum* is diſtinguiſhed by its more ſwelling, ſpotted, and very rough ſtem, and briſtly flower-ſtalks.

Cherophyllum Cy

Pastenaca 25



Pastinaca Sativa. Wild Parsnip

Pentandria Digynia

Gen. Ch. Fruit elliptical compressed almost flat. Petals involute entire Involucra neither general nor partial Spec. Ch. Leaves simply pinnate downy beneath

Found in the borders of Fields & by Road Sides. plentifully enough on a calcareous Soil but not on any other flowering in July. Root biennial. spindle shaped white aromatic sweet with a degree of acrimony. Stem 3 feet high erect branched angular furrowed roughish. Leaves pinnate with footstalks dilated at the base. Leaflets from 5 to 9 sharply serrated & somewhat cut downy beneath the odd one is 3 lobed. Umbels terminal solitary erect of several roughish rays. Involucrum in general altogether wanting but sometimes a small solitary leaf occurs at the base of the General as well as partial flower stalks for it is well known to practical Botanists

that this part affords by no means such
certain generic Characters as Senecio, D
Asteli thought the Seeds being more to be
trusted. The flowers are small with
deep yellow petals rolled inwards Fruit
large elliptical flat ribbed smooth of a
very light brown when ripe — The Gar-
den P. is a cultivated variety of
this with larger smoother leaves & a
more eatable Root —

Feb.y 1.1795 Published by J.e Sowerby London

SMYRNIUM Olusatrum.

Alexanders.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oblong, angular. *Petals* pointed, carinated. Many *flowers* abortive. *Involucra* none.

SPEC. CHAR. Stem-leaves in threes, on footstalks, serrated.

SYN. Smyrnium Olusatrum. *Linn. Sp. Pl.* 376. *Hudſ. Fl. An.* 126. *With. Bot. Arr.* 310. *Relh. Cant.* 123. *Sibth. Oxon.* 101.
Smyrnium. *Raii Syn.* 208.

THIS is rather a maritime plant, and is found near the coast in many places; but whether from having been formerly cultivated as a pot-herb, or the seeds dispersed by any other means, it now occurs about many inland towns, as Nottingham, York, Bury, Newmarket, and about Mackerell's tower Norwich. The root is biennial, and the flowers appear in May. By the middle of July the stalks are dried up, but remain laden with large black seeds.

The stem is strong, deeply furrowed. Leaves large, twice or thrice ternate, cut and serrated. Flowers small, numerous and irregular. The whole herb is of a pale bright green, smooth, succulent, in flavour something like cellery, but more strong and bitter. It is now out of use, though formerly eaten in various parts of Europe, either as a sallad or pot-herb, whence the name *Olus atrum*. Ray thinks it was called Alexanders because in Italy and Germany it had long been denominated *herba Alexandrina*, having been supposed to be brought from Alexandria.

Smyrnium 26

July 1.st 1797 Published by J.s Sowerby London

PIMPINELLA saxifraga.

Common Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* ſomewhat globular.

SPEC. CHAR. Leaves pinnate: leaflets of the radical ones roundiſh; thoſe of the uppermoſt linear.

SYN. Pimpinella ſaxifraga. *Linn. Sp. Pl.* 378. *Hudſ. Fl. An.* 127. *With. Bot. Arr.* 313. *ed.* 3. 311. *Relh. Cant.* 124. *Sibth. Ox.* 102.

P. ſaxifraga minor, foliis Sanguiſorbæ. *Raii Syn.* 213, *n.* 2 & 3.

A NATIVE of dry gravelly and calcareous ſoils, flowering in July and Auguſt.

Root perennial, ſtrong and woody, highly aromatic and pungent, to ſome perſons not unpleaſant, eſpecially when dry. Stems about a foot high, erect, ſlender, rigid, round, ſtriated and roughiſh, varying much in luxuriance, generally branched above. Leaves on long footſtalks, pinnated, veiny, roughiſh and rigid; the leaflets of the firſt radical ones roundiſh or ovate, acutely ſerrated and generally deeply notched, eſpecially the terminal leaflet; the other leaves are compoſed of decurrent, linear, often falcated, ſometimes twice pinnatifid leaflets, thoſe which grow high on the ſtem being the narroweſt and moſt ſimple, and their common footſtalk more membranous and dilated than in the reſt. Umbels drooping when young, deſtitute of general or partial *involucra*. Flowers ſmall, nearly regular, white, with long ſtamina. Top of the germen very tumid, and reddiſh. Styles ſhort. Seeds ſmall.

From repeated obſervations made on this plant wild in many different places, we entirely agree with Dr. Withering, that all the varieties enumerated in his 3d edition (except P. *orientalis* of Gouan, which we have never ſeen in England) really conſtitute but one ſpecies. Our figure is taken from a good intermediate wild ſpecimen. The characters of almoſt all the varieties may be found in it. The botaniſt will in vain attempt to meet with the excluſive characters of any one of them in many different individuals. Such a kind of variety is like the ghoſt in Hamlet, or Mrs. Radcliffe's myſterious monk of Paluzzi; we can no ſooner ſay "'tis here," than the next moment "'tis gone."

July 1794 Published by J.ᵉ Sowerby London.

PIMPINELLA magna.

Great Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* ſomewhat globular.

SPEC. CHAR. Leaves pinnate: leaflets ovate, the terminal one three-lobed.

SYN. Pimpinella magna. *Linn. Mant.* 219. *With. Bot. Arr.* 314. *ed.* 3. 313. *Relh. Cant.* 125. *Sibth. Ox.* 102.

P. major. *Hudſ. Fl. An.* 127.

P. ſaxifraga. *Raii Syn.* 213.

THIS ſpecies is leſs common than the preceding, and grows chiefly in woods and hedges in a calcareous ſoil, flowering in Auguſt or later. We received it from Mr. Robſon. Dr. Smith obſerved it under the walls of York.

Root perennial, woody, like that of P. *ſaxifraga* in flavour, but rather weaker. Stem 2 feet or more in height, round, ſtriated. Leaves on rather ſhorter footſtalks than in the laſt deſcribed, pinnated, but of fewer leaflets (ſcarcely more than 3 pair), and thoſe larger, ovate, or ovato-lanceolate, the terminal one more or leſs deeply three-cleft, and all ſtrongly ſerrated. Sometimes, as it is reported, the upper leaves are deeply pinnatifid, but that is not generally the caſe. Flowers commonly white, about the ſize of the laſt, and like them in ſtructure; but in alpine ſituations they often become roſe-coloured.

Linnæus originally confounded this with the laſt, but was afterwards convinced of his miſtake; it being very different in habit and ſize, and eſſentially diſtinguiſhed by the form, as well as greater ſmoothneſs, of the leaves. Hudſon always made them diſtinct.

Pimpinella 17

PIMPINELLA magna.

Great Burnet-Saxifrage.

Gen. Char. Involucra none. Fruit ovato-oblong, ribbed. Petals unfixed. Stigmas somewhat globular.

Spec. Char. Leaves pinnate: leaflets ovate, the terminal one three-lobed.

Syn. Pimpinella magna. Linn. Mant. 219. Web. Bot. Adv. 314. ed. 3. 313. Relh. Cant. 125. Sibth. Ox. 102.

P. major. Huds. Fl. Ang. 127.

P. laxiflora. Ray Syn. 213.

THIS species is less common than the preceding, and grows chiefly in woods and hedges in a calcareous soil, flowering in August or later. We received it from Mr. Roblon. Dr. Smith observed it under the walls of York.

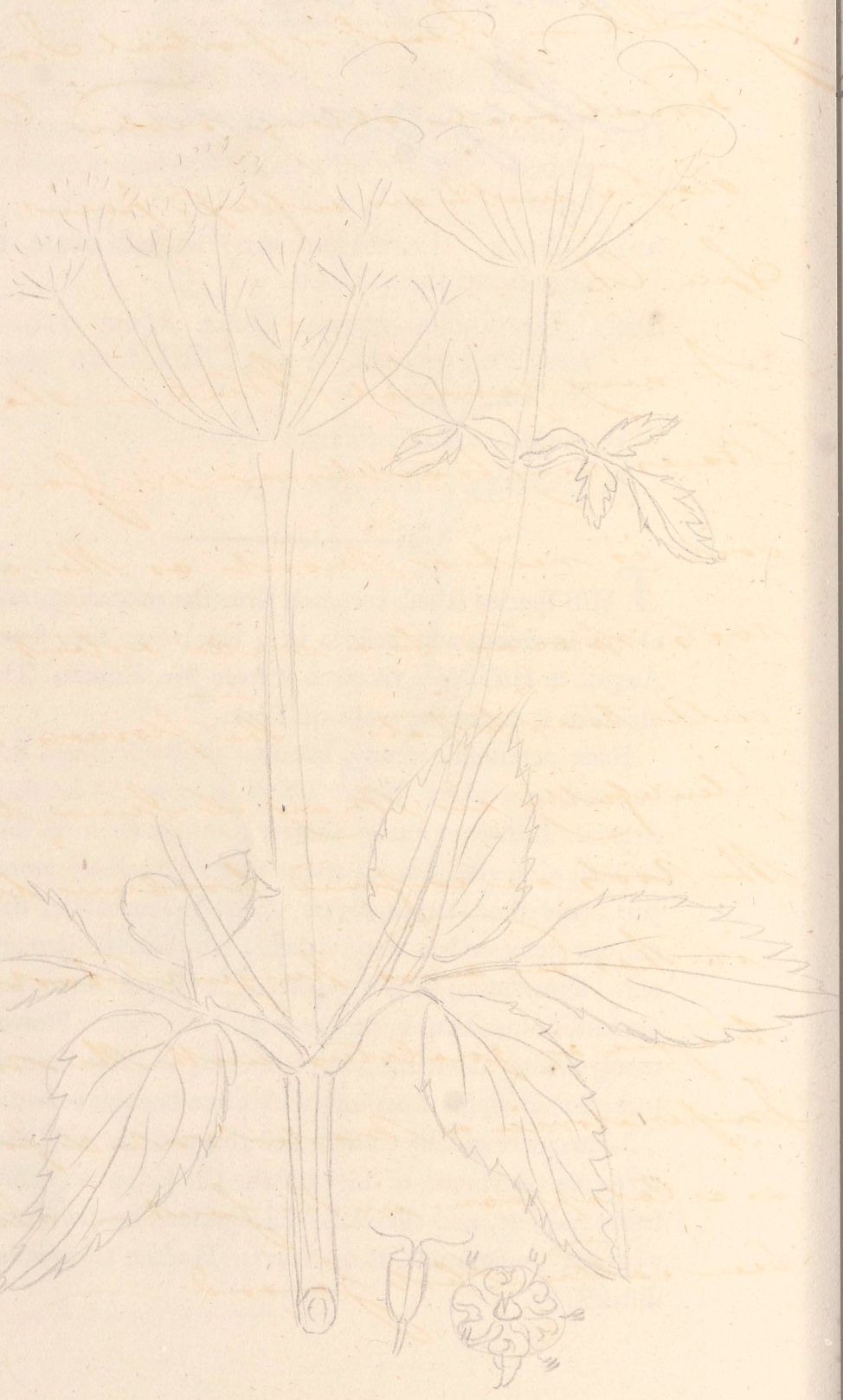
Root perennial, woody, like that of Pimpinella in flavour, but rather weaker. Stem 2 feet or more in height, round, striated. Leaves on rather shorter footstalks than in the last described, pinnated, but of fewer leaflets (scarcely more than 3 pair), and those larger, ovate, or ovate-lanceolate, the terminal one more or less deeply three-cleft, and all strongly serrated. Sometimes, as it is reported, the upper leaves are deeply pinnatifid, but that is not generally the case. Flowers commonly white, about the size of the last, and like them in structure; but in alpine situations they often become rose-coloured.

Linnæus originally confounded this with the last, but was afterwards convinced of his mistake; it being very different in habit and size, and essentially distinguished by the form, as well as greater smoothness, of the leaves. Hudson always made them distinct.

Agapodium 28

Pentandria

Digynia



Aegopodium Podagria - Goutweed

Pentandria Digynia

Gen. Ch. — Gener. or partial Involucr. no

Fruit ovate oblong ribbed Petals heart

shaped with an inflex point unequal

Spec. Ch. . . . .

A very general Weed in shady waste

Places very troublesome in Gardens whose

soil is rich or moist as the creeping

roots spread to a wide extent & are diffi

cult to extirpate — The flowers appear

plentifully in May & June but except

the roots are suppos'd produce little Seed

it has an acrid pungent Root supposed

to agree in qualities with the more active

Imperatoria or Masterwort & formerly used

as a Cataplasm in the Gout. It has also

been called Herb Gerard

July 1st 1796 Published by J.T. Sowerby London.

VIBURNUM Opulus.

Common Guelder-roſe, or Water Elder.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* ſuperior, of five leaves. *Cor.* in five ſegments. *Berry* with one ſeed.

SPEC. CHAR. Leaves lobed; their foot-ſtalks ſet with glands.

SYN. Viburnum Opulus. *Linn. Sp. Pl.* 384. *Hudſ. Fl. An.* 130. *With. Bot. Arr.* 318. *Relh. Cant.* 127. *Sibth. Ox.* 104.

Opulus. *Raii Syn.* 460.

THIS ſhrub is common in woods and hedges in watery places, flowering early in June; the bright-red berries ripen about September, and towards the middle of October the leave aſſume a beautiful pink-colour, affording another inſtance, in addition to that of the Cornel (ſee tab. 249), of a genus, moſtly American, the leaves of which turn red in autumn. In gardens the Guelder-roſe, bearing round bunches of abortive flowers only, is very common, elegantly grouping with the Lilac and Laburnum in the early part of ſummer.

It is a ſmall buſhy tree, ſmooth in all its parts. Leaves with three great, unequally ſerrated, lobes; their foot-ſtalks bearing ſeveral cup-like glands towards the top, and a pair or two of erect linear appendages, ſcarcely to be called ſtipulæ, near the baſe. Cymes of many white flowers; the perfect ones ſmall, reſembling elder; abortive ones in the margin, each conſiſting merely of a large irregular flat petal, without organs of fructification. Stigmas nearly ſeſſile, cloſe together. Berries drooping, very ſucculent. Seed flat, heart-ſhaped.

July 1st 1706 Published by Ja. Sowerby London.

VIBURNUM Lantana.

Mealy Guelder-roſe, or Way-faring Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* ſuperior, of five leaves. *Cor.* in five ſegments. *Berry* with one ſeed.

SPEC. CHAR. Leaves heart-ſhaped, ſerrated, veiny, downy beneath.

SYN. Viburnum Lantana. *Linn. Sp. Pl.* 384. *Hudſ. Fl. An.* 129. *With. Bot. Arr.* 318. *Relh. Cant.* 126. *Sibth. Ox.* 104.

Viburnum. *Raii Syn.* 460.

RAY mentions this ſhrub as growing in a clay ſoil. We have obſerved it moſt plentifully, and apparently in its true wild ſituation, in chalky places, as about Henley, Oxfordſhire; not but that it occurs alſo here and there in the woods and hedges of moſt parts of England, flowering in May.

It is a thickly-branched ſhrub or ſmall tree, growing to a larger ſize in the north of England (as Ray alſo remarks) than in the ſouth; its twigs round, pliant, and mealy, with the ſame kind of tufted ſtellated pubeſcence as is found on the flower-ſtalks, backs, and even upper ſides of the leaves. The leaves are oppoſite, as in the whole genus, ſomewhat elliptical, heart-ſhaped at the baſe, obtuſe, ſerrated, ſtrongly veined, without ſtipulæ. Flowers in large terminal cymes, white, with yellowiſh antheræ. Stigmas ſeſſile, very ſhort and thick. Berries compreſſed. When young (as in our figure) they are red on the outermoſt ſide, yellow on the other; but when quite ripe they turn black. They have a little mealy aſtringent pulp. Seed large, flat and furrowed.

This is ſuppoſed to be the *Viburnum* of Virgil; but the poet ſays nothing by which it can be aſcertained, mentioning it only in his 1ſt eclogue, ver. 26.

The leaves turn dark red in autumn.

Viburnum 1.

Sambucus Ebulus. Dwarf Elder or Danewort

Pentandria Trigynia

Gen. Ch. Cal. in 5 segments. Cor. 5 cleft
Berry with 3 seeds

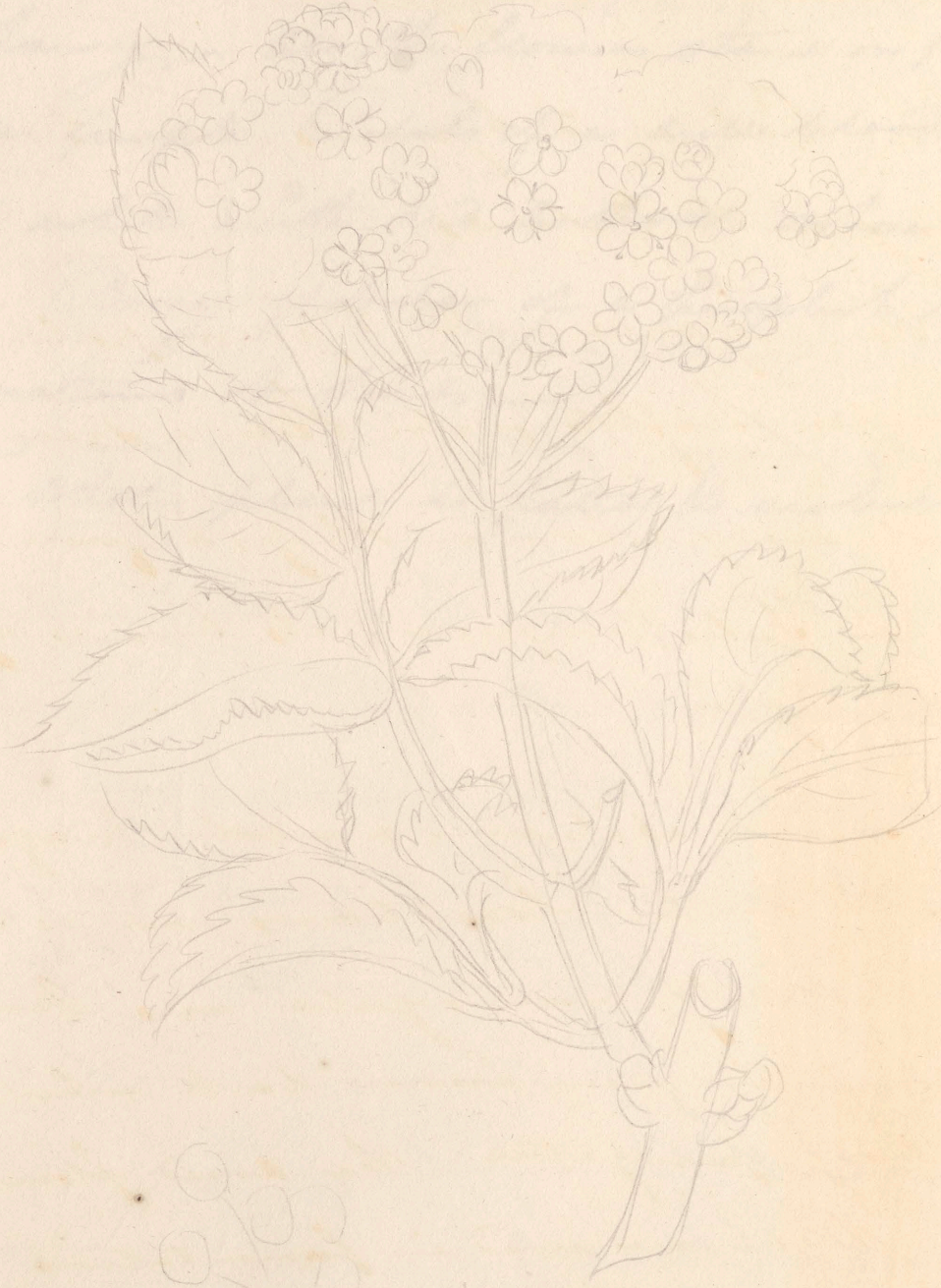
Spec. Ch. Cymes with 3 principal branches
Stipulæ leafy. Stem herbaceous

The Dwarf Elder grows here & there on waste
grounds throughout Britain not common
by tho' in great Plenty wherever it occurs
at all as the creeping Roots spread very far
& are scarcely to be eradicated. It flowers
after Midsummer & ripens its berries late in
Autumn which however like the fruit of other
creeping rooted Plants are rarely perfected
The Stem are herbaceous 3 feet high erect
roundish furrowed leafy. Leaves pinnate &
green smooth the leaflets ovate lanceolate
acute serrated unequal & generally slander-
ler at their base - Stipulæ large leafy ser-

rated sometimes accompanying a pair of leaf
as well as the whole leaf - Cyme terminal of
principal Branches & many smaller ones whe
are hairy - All the flowers stand on foots talks.
small. purple. Petals of a dull blood red. Sta
thick white with red anthers. whose lobes are
tant. Berry globular of a purplish colr. with
3 sometimes 4 Seeds —

The whole plant is fatid & violently purgati

Sambucco 2



mbucus nigra. Common Elder

Pentandria Trigynia

Gen. Ch. Cal. in 5 Segments. Cor. 5 cleft

Berry with 3 Seeds

Spec. Ch. Cymes with 5 principal

branches. Leaflets ovate. Stem a Tree

Abundant every where in Hedges & Groves

flowering in June & ripening its berries spi

ously in Sept.

This Tree is as it were a whole Magazine

of Physic to rustic Practitioners nor is it

quite neglected by more regular ones. Ointments

are made of the green inner bark which is

also a strong purgative. The dried flowers

infused in Water are used in fomentations & in

Tea. Tho in the latter Capacity they are unwelcome

to the Nerves. The berries are boiled into a rob

which is really useful in sore throats & Catarrhs

& acts as a gentle Laxative in febrile disorders.

The leaves laid in the subterraneous Paths of the

Mole drive it away & an infusion of them
extremely useful for curious Gardeners to sp
kle over the buds of such flowers as they
wish to preserve from minute Caterpillars a
few Insects can beat the Elder. The Phalana
Sambucaria however feeds on this Plant &
the colouring of its delicate Wings seems to
imitate the blossoms

Corrigiola 3

Pentandria

Trigynia

J. Sowerby delt. Jan. 1. 1792

PARNASSIA paluſtris.

Graſs of Parnaſſus.

PENTANDRIA Tetragynia.

GEN. CHAR. *Calyx* five-cleft. *Petals* five. *Nectaries* five, heart-ſhaped, fringed with briſtles terminated by little balls. *Capſule* with four valves.

SPEC. CHAR. . . .

SYN. Parnaſſia paluſtris. *Linn. Sp. Pl.* 391. *Hudſ. Fl. An.* 131. *With. Bot. Arr.* 325. *Relh. Cant.* 129.
P. vulgaris et paluſtris. *Raii Syn.* 355.

PERHAPS the nectary of the Parnaſſia paluſtris is more elaborate in ſtructure than that of any other Britiſh vegetable. We regret that its phyſiology is unknown. What ſhare thoſe capillary protuberances, tipped with pellucid globes, have in the formation of honey, is very doubtful, though that fluid is found about the lower part of the organ which ſupports them. Theſe parts however form an excellent generic character, and there is but one ſpecies of the genus. Theoretical botaniſts are not agreed about its affinities, except that it is allied to Droſera, and we think alſo to Dionæa and Saxifraga, though Mr. De Juſſieu ſeparates them all widely; but he ſeems not decided in his opinion. The Parnaſſia agrees with Saxifraga in the wonderful œconomy of its impregnation, which is performed by one of the ſtamina at a time coming over the ſtigma, and retiring again as ſoon as it has ſhed its pollen. Its place is then ſupplied by another, till all have preſented themſelves in turn, and then the ſtigma cloſes. Sometimes two come together, or nearly ſo. Rue exhibits the ſame phænomenon.

This plant is common on bogs in the northern counties as well as in Norfolk, and produces its elegant milk-white flowers in Auguſt and September. The petals are curiouſly veined with pellucid lines; they preſerve their whiteneſs when dried. The ſtem is angular and twiſted; root perennial.

PARNASSIA palustris.

Grass of Parnassus.

PENTANDRIA Tetragynia.

GEN. CHAR. Calyx five-cleft. Petals five. Nectaria five, heart-shaped, fringed with briftles terminated by little balls. Capsule with four valves.

SPEC. CHAR. . . .

SYN. Parnassia palustris. Linn. Sp. Pl. 391. Huds. Fl. Ang. 131. With. Bot. Arr. 345. Relh. Cant. 159.

P. vulgaris et palustris. Ray Syn. 355.

PERHAPS the nectary of the Parnassia palustris is more elaborate in structure than that of any other British vegetable. We regret that its physiology is unknown. What that use of capillary protuberances, tipped with beautiful globes, have in the formation of honey, is very doubtful, though that fluid is found about the lower part of the organ which supports them. Thele parts however form an excellent generic character, and there is but one species of the genus. Theoretical botanists are not agreed about its affinities, except that it is allied to Drofera, and we think also to Dionæa and Saxifraga, though Mr. De Juffieu feparates them all widely; but he feems not decided in his opinion. The Parnaffia agrees with Saxifraga in the wonderful œconomy of its impregnation, which is performed by one of the ftamina at a time coming over the ftigma, and retiring again as ſoon as it has ſhed its pollen. Its place is then ſupplied by another, till all have preſented themſelves in turn, and then the ſtigma cloſes. Sometimes two come together, or nearly ſo. Rue exhibits the ſame phænomenon.

This plant is common on bogs in the northern counties as well as in Norfolk, and produces its elegant milk-white flowers in Auguſt and September. The petals are curiouſly veined with pellucid lines; they preſerve their whiteneſs when dried. The ſtem is angular and twiſted; root perennial.

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Jan.y 1. 1795 Publish'd by J.s Sowerby London

STATICE Armeria.

Thrift.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk ſimple, bearing a round head of flowers. Leaves linear.

SYN. Statice Armeria. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 132. *With. Bot. Arr.* 326. *Relh. Cant.* 129. *Lightf. Scot.* 173.

S. montana minor. *Raii Syn.* 203.

"THE moſt humble and moſt lofty of plants," ſays Mr. Lightfoot; "it grows frequently upon the ſea-ſhores, and upon the ſummits of the higheſt mountains." Neither is it leſs common in Enl and and Wales than in Scotland, in both kinds of ſituations. We have examined it from both, and found no difference between the ſpecimens. Its favourite maritime ſoil is of the muddy kind. The conſtitution of this plant indeed ſeems of a very accommodating nature, for it grows equally well in any garden, even in the ſmoke of London, and is much uſed for edgings. From its readineſs to thrive in any ſituation, the Engliſh name has probably been given. It flowers about July and Auguſt.

Root perennial, woody, bearing many thick tufts of lax, linear, channelled, ſmooth, entire leaves. Stalks varying much in height, round, naked, each terminated by a globular head of ſeveral flowers, encompaſſed with a many-leaved involucrum, whoſe baſe is attached to a ſingular cylindrical membranous ſheath, about an inch long, which inveſts the top of the ſtalk, its lower end being looſe and lacerated, ſo that it ſeems to have been torn off from the root, and carried up with the young growing ſtalk. Calyx ſmall, erect. Petals roſe-coloured. Crown of the ſeed fringed.

Statics 5-50

T.t Sowerby del.t Ap.l 1793.

STATICE Limonium.

Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk panicled, round. Leaves ſmooth, deſtitute of nerves, tipped with a ſmall point.

SYN. Statice Limonium. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 132. *With. Bot. Arr.* 327.

Limonium. *Raii Syn.* 201.

GATHERED laſt Auguſt by Lord Viſcount Lewiſham on Woldham Marſh near Rocheſter. The plant loves a muddy ſoil in ſalt marſhes, or on the ſhores of great rivers waſhed by the tide, and flowers late. Scarcely any vegetable is more various as to luxuriance, being ſometimes found with leaves ſcarcely an inch long, and not more than ſix or eight flowers in the panicle, while at other times it is even much more large and its flowers more abundant than in the ſpecimen before us. The bright blue colour diſtinguiſhes it at a diſtance, and that colour is tolerably permanent. Though leſs magnificent than ſome foreign ſpecies of its genus, this is a very beautiful plant. Its appearance ſcarcely enough reſembles lavender to juſtify the Engliſh name, nor has it any aromatic quality. The root is ſtrong and perennial.

June 1. 1795 Published by James Sowerby London.

STATICE reticulata.

Matted Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk panicled, proſtrate; its branches zigzag, the barren ones bent back. Leaves wedge-ſhaped, a little pointed.

SYN. Statice reticulata. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 133. *With. Bot. Arr.* 327.

THIS ſpecies of *Statice* is hardly to be found in any other part of Great Britain than on the coaſt of Norfolk, where it covers many acres of muddy ſalt marſhes with its blue flowers in July and Auguſt, eſpecially about Wells, Cley and Holkham. Our ſpecimen was gathered below Wiſbeach, by the Rev. Mr. Hemſted.

Root ſtrong, woody and perennial, bearing thick tufts of ſmall, narrow, obovate, or wedge-ſhaped, leaves, ſlightly pointed, and entire. Stalks proſtrate, deſtitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate, ſharp, membranous bractea at each divarication. The bark in our ſpecimens is a little criſped and tuberculated, which we do not obſerve in the Linnæan ones. Many of the branches are barren, and thoſe often reflexed, but not always. Flowers few together in ſimple terminal ſpikes, erect, each enveloped in three or four larger ſheathing bracteæ. The ribs of the calyx, and the petals, are of a bright purpliſh blue, which turns white in drying.

There cannot be ſaid to be a good figure of this plant extant. Plukenet's *t.* 42. *f.* 4. is moſt like S. *echioides*, and Boccone's *Sic. t.* 44. is too imperfect to be of any ſervice.

J. Sowerby del.t Jan.y 1792

LINUM perenne.

Perennial Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Calyx* five-leaved. *Petals* five. *Capſule* with five valves and ten cells. *Seeds* ſolitary.

SPEC. CHAR. Calyx and capſule bluntiſh. Leaves alternate, lanceolate, entire.

SYN. Linum perenne. *Linn. Sp. Pl.* 397. *Hudſ. Fl. An.* 133. *With. Bot. Arr.* 329. *Relh. Cant.* 130.
Linum ſylveſtre cæruleum perenne erectius, flore & capitulo majore, et
Linum ſylveſtre cæruleum perenne procumbens, flore & capitulo minore. *Raii Syn.* 362.

WE truſt to the authority of Mr. Hudſon, and the above-mentioned authors who have copied him, in making theſe two plants of Ray's Synopſis varieties of each other. Ray himſelf hints that he thought them ſuch; and Hudſon aſſerts he has gathered both from the ſame root; adding, that in the procumbent variety the ſtamina are ſhorter than the ſtyles, in the erect one longer.

Linum perenne is found in the dryeſt chalk ſoil of Northamptonſhire, Cambridgeſhire, and Norfolk. Its ſtrong and knobbed woody root produces a multitude of ſlender ſtems, about a foot long, ſpreading in every direction, but more or leſs curved upward. Its flowers appear from June to Auguſt; they are of a delicate texture, and very elegant blue colour. The calyx, as Dr. Stokes obſerves, is quite ſmooth, and each of its leaves marked with five ribs; the middlemoſt of which is the ſtrongeſt.

Linum 2

March 1797 Published by J.t Sowerby London.

LINUM anguſtifolium.

Narrow-leaved Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capſ.* with 10 valves and 10 cells. *Seeds* ſolitary.

SPEC. CHAR. Calyx obſoletely three-nerved, ſharp-pointed, as well as the capſule, and linear-lanceolate three-nerved leaves. Stems numerous, a little inclined.

SYN. Linum anguſtifolium. *Hudſ. Fl. An.* 134. *With. Bot. Arr.* 329.

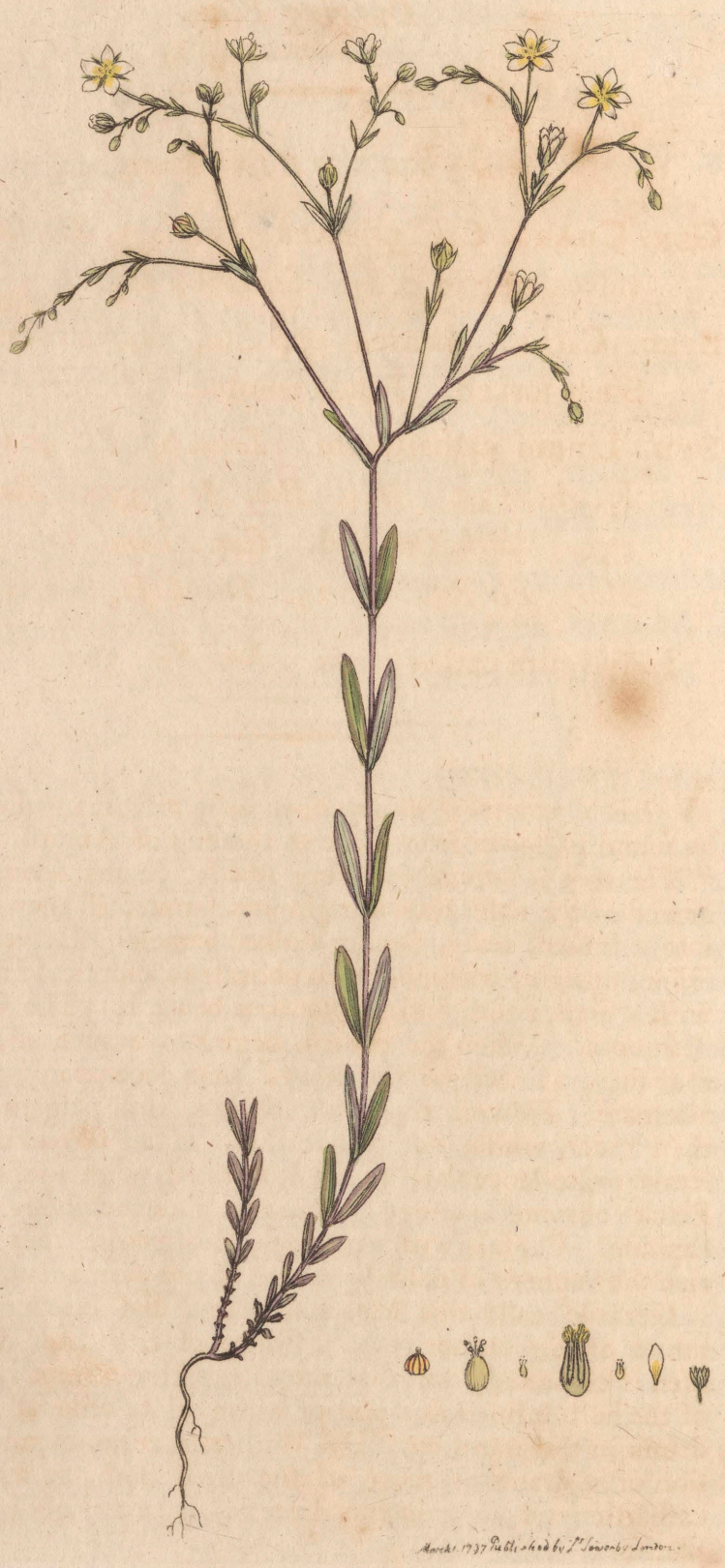
L. tenuifolium ζ. *Linn. Sp. Pl.* 399.

L. ſylveſtre anguſtifolium, floribus dilute purpuraſcentibus vel carneis. *Raii Syn.* 362.

COMMUNICATED by D. E. Davy, Eſq. who found it wild in great plenty at Darſham, Suffolk, flowering in July. It occurs in dry ſandy paſtures, eſpecially near the ſea; and is ſaid to be moſt plentiful in Cornwall and Devonſhire.

Linnæus very improperly confounded this with his L. *tenuifolium*, which has a very long-pointed calyx with glandular ſerratures, and leaves with rough edges and only a central nerve. That is Haller's No. 838, as we learn from Mr. Davall. Ours is moſt nearly allied to L. *uſitatiſſimum* in the ſtructure of all its parts, except in having a woody perennial root producing many ſtems; it differs alſo at firſt ſight in having ſmaller paler flowers. The leaves have 3, ſometimes 5, nerves, their edges entire and ſmooth. Calyx-leaves ſmooth, elliptical, with a ſharp point; in the flowering ſtate ſcarcely more than one nerve is viſible, but as the fruit ripens the calyx becomes diſtinctly 3-nerved. The petals are entire, or ſlightly notched. Valves of the capſule diſtinctly 10, cohering by their inflexed margins, which make the partitions of the 10 cells. We have therefore altered the generic character, as M. de Juſſieu has done, to 10 (not 5) valves. We cannot however agree with that learned botaniſt in referring this genus to his order of *Caryophylleæ*. Surely it belongs to the *Gerania*. The cells of the capſule are cloſely analogous to *arilli*, and about the reſt of the characters there can be no doubt. See *Juſſ. Gen.* 303.

L. *perenne*, *tab.* 40, is ſufficiently diſtinguiſhable from this ſpecies by its more obtuſe 5-nerved calyx, and more capitate ſtigmas.



March 1. 1837 Published by J.t Sowerby London.

LINUM catharticum.

Purging Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capſ.* with 10 valves and 10 cells. *Seeds* ſolitary.

SPEC. CHAR. Leaves oppoſite, obovato-lanceolate. Stem forked. Petals pointed.

SYN. Linum catharticum. *Linn. Sp. Pl.* 401. *Hudſ. Fl. An.* 134. *With. Bot. Arr.* 330. *Relh. Cant.* 131. *Sibth. Ox.* 106. *Curt. Lond. faſc.* 3. *t.* 19. *Mart. Fl. Ruſt. t.* 135. *Dickſ. H. Sicc. faſc.* 3. 7.

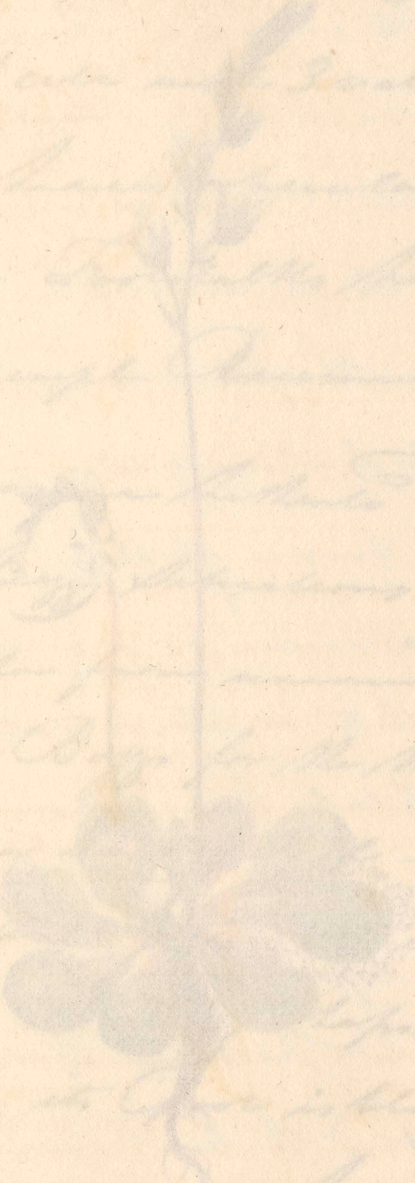
L. ſylveſtre catharticum. *Raii Syn.* 362.

VERY common in dry open hilly paſtures, where it may be found in flower from June to the end of Auguſt.

The root is annual and very ſmall. Stems ſeveral, round, bowed at the baſe, then upright and ſimple, till they branch off into a forked, leafy, ſlender-ſtalked panicle. Leaves oppoſite, ſeſſile, upright, inclining to an obovate or elliptical form, obtuſe with a ſlight point, entire, glaucous beneath. The whole herb is ſmooth. When the panicle begins to branch off, its lower branches, as well as the leaves that accompany them, are alternate. Flowers terminal, ſolitary, drooping in the bud, then erect, white, not unlike thoſe of an *Arenaria*. Calyx-leaves ovato-lanceolate, pointed, ſerrated, with a ſolitary nerve. Petals obovate, pointed. Stamina monadelphous. Stigmas capitate. Capſule with 10 valves, but before they are quite ripe they cohere in pairs by means of the permanent ſtyles.

Gerarde calls this Mill-mountaine, and celebrates it as a purge on the authority of a Biſhop of Bath and Wells, who uſed it commonly for that purpoſe. His receipt is a handful of the herb infuſed in a pint of warm white wine all night, and drunk in the morning. Dr. Withering recommends an infuſion of 2 drams or more of the dried herb, as an excellent cathartic (and ſometimes a diuretic) in many obſtinate rheumatiſms.

Drosera 3



Drosera rotundifolia — Round leaved Sun dew

Pentandria Hexagynia

Gen Ch — Cal 5 clept Petals 5 — Caps
super — of 1 cell with 3 valves Seeds many
Stalk — leaves orbicular radical
depressed — Footstalks hairy — Stalk
bearing a simple Raceme —

Every Drosera hitherto discovered
grows in Bogs Situations — Our British
Species are far from uncommon in any
wet spongy Bogs for the most part over
a gravelly or sandy Soil — They flower
in July & Augst & are all we believe pe-
rennial — This is perhaps the most
common — its Root is black & fibrous
leaves numerous on hairy footstalks
radical depressed & forming a sort of
Star on the ground or surrounding moss
very conspicuous by their bright green
& red Color the latter of which chiefly
resides in the numerous glandular Bristles

cast tipped with a clear dusted Globule
which ornament the Margin & Surface of the
leaves — & which by a Lens of considerable
Ability observed by some Naturalists are Mou
to contract & to imprison Insects like the
Canadian Drosera a Plant of the same
Natural Order — This considerable if its
effects is only to be detected in very sunny days
nor indeed as the flowers expand in any other
Weather — a few erect simple naked Stalks
rise from the Crown of the root each bearing
a simple Racemus or rather perhaps a
Spike of white or blush col.d flowers with
always 5 Petals & as many Stamina
& 3 pair of spreading recurved Styles — The
parts of fructification have not been found
to vary in this Species — Sometimes the
Stalk is reported to be branched —

867

Drosera longifolia – Long leaved Sun Dew

Pentandria Hexagynia

Genl Ch – Cal 5 cleft. Petals 5. Caps superi. of 1 cell with 3 Valves Seeds many

Spec. Ch. Leaves obovate radical upright – Stalk bearing a simple Racemus

This Species is found in the same situations as D. rotundifolia tho somewhat less frequently & flowers at the same season – In root & general habit it altogether agrees with the former differing chiefly in its leaves which are not depressed but nearly erect standing on long stalks & their form is obovate not orbicular – The footstalks of the leaves of rotundifolia are hairy – of this & anglica they are smooth & more fine this cleft constant – The Styles of the longifolia vary from 6 to 8 full as often as in Dianglica. The Petals & Stamina are also frequently 6.

869

Drosera anglica — Great Sun Dew.

Pentandria Hexagynia

Gen. Ch. as before —

Spec. Ch. Leaves oblong oblate radical upright. Styles 8. Caps. with 4 valves —

Linnaeus has not noted this Species it is far less commonly met with than either of the others — We have gathered it in Norfolk — It is most nearly related to D. longifolia but is generally twice as large — We have found 8 Petals & as many Stamina in some Plants a number exceeding any observed in the longifolia The more elongated form of the Caps. promises to be a good discriminating mark The most certain Character of this Species seems to consist in the oblong & almost linear form of its leaves which we have not found to vary —

Some Theoretical Doctors fabled very the perpetual moisture of the Sundew

even in the greatest heat thought it must
be a good medicine for consumptive Patients
whose moisture they supposed to be drying up
but good old Gerarde confesses that they
who took this new restorative and the cure
which is no wonder considering its acrid
Nature

Tabula 4

Pentandria

Pentagynia

Sibbaldia procumbens - Procumbent S.

Pentandria Pentagynia

Genth - Cal in 10 Segments Petals 5
standing on the Cal. Styles from the side
of the Germen. Seeds 5 in the bottom of the Cal.
Spec Ch Leaflets wedgeshaped 3 toothed

The Summits of the Highland Mountains abound with this. which throws here in a mouldering humorous soil full as luxuriantly as in any Garden & may be found in flower throughout July - Root woody tufted & perennial - Stems short spreading & procumbent except sometimes at their flowering extremities, hairy round downy - leaves on long footstalks with a pair of oblong acute Stipula like those of a rose united to their base - leaflets 3 on short partial footstalks wedgeshaped terminating in 3 large teeth but sometimes entire a little hairy - Flowers in a sort of small hairy corymbus Bractate & linear specious with a hairy Cal. cut into 10

lobes alternately larger & smaller & bearing
5 little obtuse yellow Petals & as many
Stamina placed on a thickened Rim as
is proper to the rosaceous Order to which
this Genus belongs — Germen of 5 nakedly 5
10 little round embryos each bearing a
small lateral Style — The Seeds are very
small & roundish — I first Robert Sibbald
first described & figured this Plant

Myrsine

Pentandria

Polygynia

1797 Published by J.c Sowerby London.

MYOSURUS minimus.

Mouſe-tail.

PENTANDRIA Polygynia.

GEN. CHAR. *Cal.* of 5 leaves, each with a ſpur at the baſe. *Petals* 5, with a tubular claw. *Seeds* numerous.

SPEC. CHAR. . . . .

SYN. Myoſurus minimus. *Linn. Sp. Pl.* 407. *Hudſ.* 136. *With.* 326. *Relh.* 132. *Sibth.* 107. *Curt. Lond. faſc.* 4. *t.* 26.

Myoſuros. *Raii Syn.* 251.

A NATIVE of gravelly corn-fields, not unfrequent about London. It has alſo been obſerved in ſeveral parts of Norfolk, always flowering in the early part of ſummer; after which it ſoon ſheds its ſeeds, and withers away.

Root annual, fibrous, very ſmall. Herb ſmooth, varying extremely in ſize according to the luxuriance of the ſoil. Stem none. Leaves numerous, nearly upright, a little fleſhy, of a linear ſomewhat ſpatulate form, entire, pale green. Stalks ſeveral, upright, longer than the leaves, ſimple, round, a little thicker upwards, each bearing a ſmall, erect, pale yellowiſh flower. Calyx of 5 elliptical concave leaves, ſpurred at the baſe below their inſertion. Petals 5, ſcarcely longer than the calyx, pale, ſlender, conſiſting of a honey-bearing tubular claw, and a ſhort ſpreading lanceolate border. Stamina generally about 5, but in luxuriant plants much more numerous, the length of the corolla, with vertical linear antheræ. Piſtillum conical, longer than the ſtamina, compoſed of a conical receptacle, covered with a great number (even 2 or 3 hundred) of ovate, ſtriated germens, each furniſhed with its own minute ſeſſile ſtigma. This plant affords a remarkable and rare inſtance of a very great diſproportion of males to females in the ſame flower, and yet the latter are generally all prolific. The ſeeds are juſtly deſcribed by Linnæus as naked; for the part which Juſſieu denominates a capſule, is ſurely nothing more than a thickened inſeparable coat, as in *Ranunculus*, to which the *Myoſurus* very nearly belongs; there being the cloſeſt affinity between the nectariferous pore in the claw of the petals in that genus, and the tubular claw of *Myoſurus*.

51 drawings
76 Sowerby plates